UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL
(UCI)

PROJECT MANAGEMENT PLAN FOR THE DEVELOPMENT OF HUMAN RESOURCE MANAGEMENT SYSTEM GUIDELINES IN THE MANUFACTURING SECTOR THAT ALLOW COMPLIANCE WITH ISO 30414:2018

FINAL GRADUATION PROJECT NAME (TOPIC)

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APPROVAL PAGE

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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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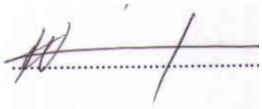

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DEDICATION

To all those who believed in me, encouraged me, and supported me. I am forever grateful.

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The completion of this final Graduation Project would not have been possible without the support of my family, friends, co-workers and well-wishers.

I would like to thank my Tutor, Professor Roger Eduardo Valverde Jiminez for his encouragement, and the endless times he gave effortless feedback and guidance through the development of the project. Professor, thank you.

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Many prayers, tears, sleepless days, and moments of frustration went into staying the course; and I would like to acknowledge the presence and faithful support of the Holy Spirit which was constantly cheering me on.

ABSTRACT

The objective of this document is to build a manual for enabling compliance with ISO 30414:2018: Human Resource Management — Guidelines for Internal and External Human Capital Reporting, for companies within the manufacturing sector in Jamaica. The Manufacturing Sector represents a critical component of the Jamaican economy, and it is important that the manufacturing industry achieves international standards of product and productivity through human capital reporting (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020). There are no similar Project Management Plans that exist within the industry in Jamaica that are designed to allow compliance with ISO 3014:2018. The development of a Human Capital Reporting guideline for the Manufacturing Industry, according to (The Observatory of Economic Complexity (OEC), n.d.), aids in better ease of doing business, and hence improvement in export revenues within the sector.

The final product of this project consists of a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018". This study is made up of the final deliverables that are framed within the standards of regenerative and sustainable development; and corresponds to the project's management plans: management plans for integration, scope, schedule, costs, quality, resources, communications, risks, procurement, and stakeholders. For this, mixed-methods methodology and the guide provided by the Project Management Institute are used.

As a result of the project, it is identified that The Manufacturing Sector represents a critical component of the Jamaican economy. Therefore, the implementation of Human Resource system guidelines reduces administrative and processing costs, results in increased efficiencies, and "improves the value-added knowledge gained from analytics while supporting the organization's (Industry's) principal business needs" (Trading Economics, 2023)

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ABBREVIATIONS AND ACRONYMS

BSJ	Bureau of Standards Jamaica
CPC	Chief Parliamentary Counsel
DBJ	Development Bank of Jamaica
FGP	Final Graduation Project
GDP	Gross Domestic Product
GPM	Green Project Management
HCR	Human Capital Reporting
HEART	Human Employment and Resource Training Trust
HR	Human Resource
HRMS	Human Resource Management System
ICS	International Classification for Standards
ISO	International Organization of Standards
ISO/AWI	Approved Work Item
JBS	Jamaica Bureau of Standards
JMEA	Jamaica Manufacturer's & Exporters Association
MICAF	Ministry of Industry, Commerce, Agriculture and Fisheries
NTA	National Training Agency
P5	The Global Standard for Sustainable Project Management
PIOJ	Planning Institute of Jamaica
PMA	Project Management Academy
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PRiSM	Project Integrating Sustainability Measures
PSOJ	Private Sector Organization of Jamaica
SBAJ	Small Business Association of Jamaica
SDG	Sustainable Development Goals
SHRM	Society for Human Resource Management
STATIN	Statistical Institute of Jamaica
STEM	Science, Technology, Engineering and Math
TBT	Technical Barriers to Trade
VTA	Voucher for Technical Assistance
WBS	Work Breakdown Structure
WTO	World Trade Organization

EXECUTIVE SUMMARY

Based upon its contribution to the Jamaican economy, “it is important that the manufacturing industry achieve international standards of product and productivity through human capital reporting” (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020). This could be achieved by the development of a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018. In accordance with its Jamaica Bureau of Standards (JBS) Certification Mark Programme, the Bureau of Standards Jamaica (BSJ), in the year, 2022, published its “Draft Jamaican Standard Guide for Human Resource Management – Guidelines for Internal and External Human Capital Reporting”, titled JS ISO 30414: 2022, for a non-objection period: 14 August 2022 – 12 September 2022 (Bureau of Standards Jamaica, 2022).

It has been observed that though several institutions tout the benefit of achieving ISO in Jamaica, documentation speaks only to what the Certification is and the core areas of focus. However, there are no detailed guide as to how these can be achieved.
Whilst, the BSJ has adopted and published the standards of ISO 30414:2022, there still exists a deficiency in the case of having a wholesome guide that in addition to listing the requirements of achieving ISO 3014:2022, would be able to guide organizations on how to achieve each objective, or apply the required metrics. This research paper proposes to address this issue by developing a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

The Final Graduation Project general objective was to develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018. The specific objectives were: (1) To develop a Project management Plan framed within the standards of the Project Management Institute “to document the processes, practices, inputs, tools and techniques” (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018; (2) To develop the Integration Management Plan “to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities” (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.; (3) To develop the Scope Management Plan “to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete” (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018; (4) To develop the Schedule Management Plan “to include the processes required to manage the timely completion” (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 (5) To develop

the Cost Management Plan “to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs” (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget (6) To develop the Quality Management Plan “to include the processes for incorporating the industry’s quality policy regarding planning, managing, and controlling project and product quality requirements” (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder’s expectations (7) To develop the Resource Management Plan “to include the processes to identify, acquire and manage the resources needed to successfully complete” (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 (8) To develop the Communications Management Plan to “include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal” (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018; (9) To develop the Risk Management Plan “to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring” (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018; (10) To develop the Procurement Management Plan “to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team” (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018; (11) To develop the Stakeholder Management Plan “to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact” (Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution; and (12) To develop a Project Management Plan framed within the standards of Regenerative Development that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

A mixed-methods methodology was used in this research comprising both qualitative (Literature Reviews) and quantitative (Secondary Data Collection and Analysis).

1 INTRODUCTION

The project aims to answer the question, “What elements must have a guide that allow the development of Human Resource Management systems that comply with International Organization for Standard (ISO)”. In attempting to answer this question, the project first considers the possibility of building a manual for enabling compliance with ISO 30414:2018: Human Resource Management — Guidelines for Internal and External Human Capital Reporting, for companies within the manufacturing sector in Jamaica. To achieve this, the general objective of the project will be "To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018". It is important to note that ISO 30414:2022 will replace the previously published ISO 30414:2018, and is now at the ‘under development’ stage, entitled, ISO/AWI 30414.

Whilst, the Bureau of Standards Jamaica (BSJ) has adopted and published the standards of ISO 30414:2022, there still exists a deficiency in the case of having a wholesome guide that in addition to listing the requirements of achieving ISO 3014:2022, would be able to guide organizations on how to achieve each objective, or apply the required metrics. This research paper proposes to address this issue by developing a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

1.1. Background

In accordance with its Jamaica Bureau of Standards (JBS) Certification Mark Programme, the Bureau of Standards Jamaica (BSJ), in the year, 2022, published its "Draft Jamaican Standard Guide for Human Resource Management – Guidelines for Internal and External Human Capital Reporting", titled JS ISO 30414: 2022, for a non-objection period: 14 August 2022 – 12 September 2022 (Bureau of Standards Jamaica, 2022). It has been observed that though several institutions tout the benefit of achieving ISO in Jamaica, documentation speaks only to what the Certification is and the core areas of focus. However, there are no detailed guide as to how these can be achieved.

The BSJ published the final 'adapted' standards 'FDJS ISO 30414: 2022', in October 2022, as part of its Standards Development Work Programme in order to meet the requirements specified in Annex 3 Code of Good Practice for the Preparation, Adoption and Application of Standards prepared by the World Trade Organization (WTO) in the Agreement on Technical Barriers to Trade (TBT). "The JBS provides certification services for manufacturers participating in the programme and licensed to use the gazetted JBS Certification Marks to indicate conformity with Jamaican standards" (Bureau of Standards Jamaica, 2022).

The Work Programme contains a list and status of draft standards which are being developed/adopted/revised; classification of the drafts according to the International Classification for Standards (ICS); international standards considered in the development of the draft standards; and a list of standards published since the last publication of the Work Programme.

In accordance with (Business Development Bank of Canada, n.d.), ”there are several steps to becoming ISO certified: (1) Development of a Management System; (2) Implementation of the System; (3) Verification of the Efficacy of the System; and (4) Registration of the System”. Included in these four (4) steps, are the importance of identifying and documenting the business processes, ensuring that the identified processes and procedures are being followed, and creating effective reporting systems to monitor the objectives of the ISO certification.

For developing countries, the manufacturing sector offers the opportunity to re-balance the economy towards higher value-added sectors. “Manufacturing is important to Jamaica as the process of converting raw material into finished product through the application of technology, the employment of capital equipment, and the engagement of labour, delivers substantial economic value-add. Manufacturing, therefore, has a tremendous capacity to impact and sustain economic and employment growth (Ministry of Finance and the Public Service, n.d.).

In his Sectoral Speech on January 19, 2020, the Minister, The Honourable Nigel Clarke, Jamaica’s Minister of Finance and the Public Service, stated that, “the manufacturing sector of the economy has been experiencing the most robust and consistent period of growth of any period in at least 25 years”. Whilst GDP from Manufacturing in Jamaica increased to 18,025 USD Million in the third quarter of 2022 from 17,327 USD Million in the second quarter of 2022, according to (Trading Economics, 2023), Minister Clarke also added that the manufacturing sector constitutes only 8.7 per cent of the economy and, as a result, its average quarterly growth of 2.2 per cent over the last four

years has not been sufficient to substantially compensate for the variability in other areas of the economy. As a result, the manufacturing sector's recent consistently excellent performance has received little attention.

Minister Clarke stated that, "While Jamaica's fiscal incentive regime does not prefer one sector over another, the GOJ is firmly of the view that Jamaica has great potential in manufacturing and this sector is strategically important for Jamaica's growth and employment ambitions" (Mininstry of Finance and the Public Service, n.d.). It is crucial that the manufacturing sector achieves international standards of product and productivity through human capital reporting given its role to the Jamaican economy (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020). This could be achieved by the development of a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

Generally, the services of a Consultant are engaged to lead the organization in achieving ISO Certification. This Consultant however, would guide the organization through the process of becoming ISO certified, but not develop a project management plan that can guide all the stakeholders, and become a historical data and repository for lessons learned.

Whilst, the BSJ has adopted and published the standards of ISO 30414:2022, there still exists a deficiency in the case of having a wholesome guide that in addition to listing the requirements of achieving ISO 3014:2022, would be able to guide organizations on how to achieve each objective, or apply the required metrics. This research paper proposes to

address this issue by developing a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018. It is important to note that ISO 30414:2022 will replace the previously published ISO 30414:2018, and is now at the ‘under development’ stage, entitled, ISO/AWI 30414.

1.2. Statement of the problem

Based upon its contribution to the Jamaican economy, it is important that the manufacturing industry achieve international standards of product and productivity through human capital reporting. This could be achieved by the development of a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with International Organization for Standardization (ISO) 30414:2018 (ISO, n.d.).

According to, (International Organization for Standardization, 2021), “ISO develops consensus-based standards that are relevant and respond to current and future challenges”. One of the objective of ISO 30414:2018 Human Resource Management — Guidelines for Internal and External Human Capital Reporting is “to consider and to make transparent the human capital contribution to the organization in order to support sustainability of the workforce” (ISO, n.d.). Improving Jamaica’s productive capacity can be achieved by applying the core Human Capital Reporting (HCR) areas under this standard.

Whilst, the Bureau of Standards Jamaica (BSJ) has adopted and published the standards of ISO 30414:2022, there still exists a deficiency in providing guidance to organizations on how to achieve each objective, or apply the required metrics. This research paper proposes to address this issue by developing a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

1.3. Purpose

The purpose or justification for the project is that firstly, there are no similar Project Management Plans that exist within the manufacturing industry in Jamaica that are designed to allow compliance with ISO 3014:2018. Aside from listing the requirements for achieving ISO 30414:2018, (Bureau of Standards Jamaica, 2022), there is no detailed document that guides organizations on how to achieve compliance. Therefore, this Project Management Plan will focus on including all stakeholders, with consideration given to small, medium and large-sized firms within the industry.

Secondly, the Manufacturing Sector represents a critical component of the Jamaican economy. Therefore, in order to meet the organization's (Industry's) primary business goals, the application of Human Resource system guidelines will lower administrative and processing costs, increase efficiency, and "improve the value-added knowledge obtained from analytics" (Trading Economics, 2023). The success of this project will equip organizations to better comply with ISO 3014:2018.

And lastly, in 2020, Jamaica exported a total of $1.31B, making it the number 147 exporter in the world. According to, (The Observatory of Economic Complexity (OEC), n.d.), "during the last five reported years the exports of Jamaica have changed by -$103M from $1.42B in 2015 to $1.31B in 2020". The development of a Human Capital Reporting guideline for the Manufacturing Industry, will aid in better ease of doing business, and hence improvement in export revenues within the sector.

1.4. General objective

The general objective for the project is, "To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018".

1.5. Specific objectives

The specific objectives for the project are as follows:

1. To develop a Project management Plan framed within the standards of the Project Management Institute “to document the processes, practices, inputs, tools and techniques” (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.2.
2. To develop the Integration Management Plan “to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities” (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.
3. To develop the Scope Management Plan “to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete” (Project Management Institute, 2017) the

Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

4. To develop the Schedule Management Plan “to include the processes required to manage the timely completion” (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.
5. To develop the Cost Management Plan “to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs” (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget.
6. To develop the Quality Management Plan “to include the processes for incorporating the industry’s quality policy regarding planning, managing, and controlling project and product quality requirements” (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder’s expectations.
7. To develop the Resource Management Plan “to include the processes to identify, acquire and manage the resources needed to successfully complete” (Project Management Institute, 2017) the Development of Human Resource

Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018

8. To develop the Communications Management Plan to "include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.
9. To develop the Risk Management Plan "to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.
10. To develop the Procurement Management Plan "to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team" (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.
11. To develop the Stakeholder Management Plan "to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact"

(Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.

12. To develop a Project Management Plan framed within the standards of Regenerative Development that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

2 THEORETICAL FRAMEWORK

According to (Vinz, 2022), “a theoretical framework is a foundational review of existing theories that serves as a roadmap for developing the arguments that will be used within any research paper”. In other words, the theoretical framework justifies and contextualizes the later research, and it’s a crucial first step for the research paper, thesis, or dissertation.

2.1 Company/Enterprise framework

The manufacturing industry has its own governance framework in which it operates. Governance framework sets the objectives, policies, values, culture, accountabilities, and performance metrics for the organization and provide an essential supporting structure – a framework of rules and practices by which for the efficient and transparent operation of the organization (McMenemy, 2023).

According to (Cummins, 2017), “Industry frameworks provide prototypical designs of enterprises in a particular industry, based on a consensus of industry representatives. The frameworks tend to define characteristic breakdowns of functionality and business processes that may align with capabilities.” Though each enterprise may be different due to specific circumstances or ways of conducting business, in comparison to industry-specific value chains, industry frameworks offer more detail and objectivity. The variations in enterprise-specification serves as a foundation for gaining competitive edge in particular markets.

The governance framework provides a mechanism for senior management, as well as those at the operational level, to have a clear understanding and oversight of each other's

expectations, objectives, performance, risk appetite, and reporting requirements. In addition, that these aspects are effectively communicated to relevant persons in the organization. Thus, the corporate Risk management and security risk management are integral components of effective corporate governance.

2.1.1 Company/Enterprise background

In the Jamaican economy, the manufacturing sector represents the largest goods-producing sector. The ability of the firm to combine technology, management, entrepreneurship, employee skills, business organization, and software to service markets and engage with customers and suppliers determines the competitiveness of manufacturing enterprises.

According to (Manufacturing Task Force, 2009), “Manufacturing and agro-processing represent the application of technical know-how and process equipment (embedded knowledge) together with capital and labour leading to the transformation, with clear value addition, of locally available or imported raw materials and intermediate inputs into final or intermediate products for domestic and export markets”. In addition to highlighting the manufacturing sector, the plan for national development also includes agro-processing, non-metallic minerals, construction, ICT, energy, tourism, and distributive commerce.

The main association for the manufacturing sector in Jamaica is the Jamaica Manufacturers’ Association (JMEA), which has over 250 member companies across a range of sub-sectors. According to the (Manufacturing Task Force), the JMEA undertakes

sectoral developmental" activities such as the promotion of modern production methods and quality standards, sales and marketing facilitation for Jamaican manufactured products, provision of relevant business and sectoral information, and lobbying with government and other interest groups on behalf of manufacturers". Other relevant associations representing manufacturers include the Jamaica Exporters' Association (JEA) and the Small Business Association of Jamaica (SBAJ.

According to (Mininstry of Finance and the Public Service, n.d.), "after decades of decline, the manufacturing sector is experiencing a renaissance with consistent increases in output". However, government policy is simply one factor in the situation. Manufacturing companies and business owners have taken a heavy risk to invest, retool, hire, and expand, as the manufacturing sector of the economy is currently going through its strongest and steadiest expansion in at least 25 years. Dr. Audley Shaw Minister of Industry, Commerce, Agriculture and Fisheries, in the same report, cites that "Over the past four years, with the exception of two quarters, the industry has had year-over-year quarterly economic growth. No other time in the past 25 years has seen the manufacturing sector perform as consistently or as well. Additionally, no other industry on the side of the economy that produces goods has had a four-year performance as steady as manufacturing" (Ministry of Finance and the Public Service, n.d.).

According to a recent report from the Statistical Institute of Jamaica (STATIN), "the manufacturing sector grew by 4.3% in the third quarter of 2019 compared to the third quarter of 2018. This comes after the second quarter of 2019 saw increase of 3.8% over the second quarter of 2018. Manufacturing output increased overall over December 2015 levels

by almost 10% in real terms as of September 2019. This is incredibly uplifting. However, the manufacturing sector's output in 2019 was still, in real terms, less than it was in 1996, 25 years earlier. Therefore, there is still more work to be done. (Mininstry of Finance and the Public Service, n.d.).

Whilst the GDP from Manufacturing in Jamaica increased to 18,025 USD Million in the third quarter of 2022 from 17,327 USD Million in the second quarter of 2022, Jamaica's Minister of Finance, the Honourable Nigel Clarke stated in his Sectoral speech that "the manufacturing sector constitutes only 8.7 per cent of the economy and, as a result, its average quarterly growth of 2.2 per cent over the last four years has not been sufficient to substantially compensate for the variability in other areas of the economy. As such, the recent consistent positive performance of the manufacturing sector has largely gone unnoticed. This may be because we are still psychologically rooted in the traumatic experience of the gutting of Jamaica's productive capacity over much of the past 25 years, beginning in the mid-1990s" (Trading Economics, 2023).

2.1.2 Mission and vision statements

Mission Statement

Using Integrated Project Management principles and guidelines in the development of a Final Graduation Project that delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector, which allow its compliance with ISO 30414:2018

Vision Statement

To create a manufacturing sector that is fully ISO 30414:2018 certified.

2.1.3 Organizational structure

Organizational structure is the method by which work flows through an organization. It allows groups to work together within their individual functions to manage tasks. Traditional organizational structures tend to be more formalized—with employees grouped by function (such as finance or operations), region or product line. Less traditional structures are more loosely woven and flexible, with the ability to respond quickly to changing business environments.

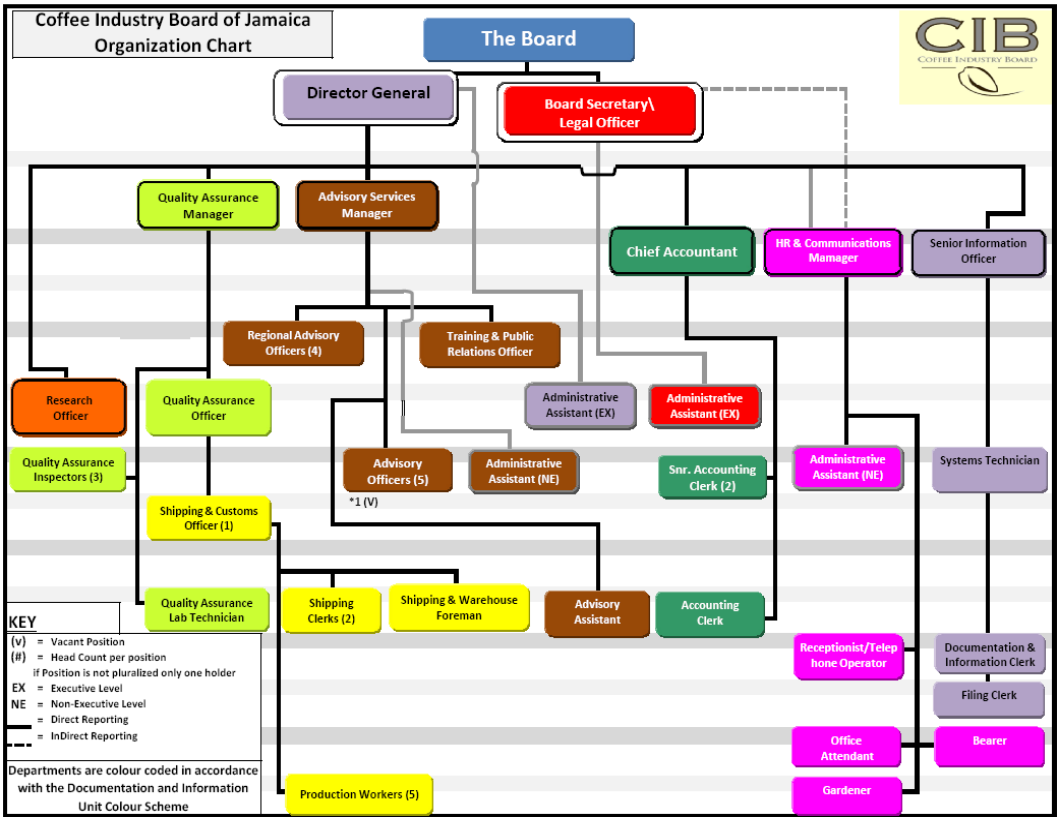
An organization's organizational structure connects and aligns its various components for optimum performance. The choice of structure affects how effectively an organization carries out its strategy and objectives. Leadership should be knowledgeable of the characteristics, benefits, and limitations of various organizational structures to aid in this strategic alignment (SHRM, n.d.).

According to (Lynch, 2022), “a manufacturing organizational chart ideally provides the overall hierarchy and business order in a manufacturing firm. A manufacturing organizational chart always covers the process of production, purchasing, marketing, technical, accounting, HR, and customer service”. This organizational chart allows both managers and workers to understand the complete manufacturing process clearly.

Within the Jamaican Manufacturing Sector, a Matrix Organizational chart is used. the term “matrix project organization” refers to a multidisciplinary team whose members are drawn from various lines or functional units of the hierarchical organization. According to, (Usmani, 2022), “the matrix organizational structure, is the most popular organizational structure adopted by medium to large organizations”. Because it gives them the flexibility

they need to manage their operations, manufacturers prefer this kind of organizational structure. Due to the fact that projectized and functional organizations are by their very nature rigid, the matrix form is appealing. Below is an example of a Matrix Organizational Chart, adapted from the Jamaica Agricultural Commodities Regulatory Authority's Coffee Industry Division.

Figure 1: Organizational structure (Jamaica Agricultural Commodities Regulatory Authority, 2023)



Note: Adapted from the Jamaica Agricultural Commodities Regulatory Authority: Coffee Division, 2023, with authorization from the Owner

2.1.4 Manufacturing Industry: Products offered

The Industry for which this project is being developed is the Manufacturing Industry, within the Jamaican landscape. The project best suits this industry, as the

manufacturing sector employs many persons either full-time or as independent contractors. Establishing guidelines to better encourage better human capital reporting for the industry will be highly beneficial to Jamaica as a whole.

The Economic & Social Survey of Jamaica (ESSJ) 2018, when considering the exports of the manufacturing sector, categorizes the twelve (12) sub-industries into two main groups (detailed below)**.** Jamaica has a fairly diversified manufacturing sector, comprising two main categories – traditional and non-traditional. Traditional manufactured goods include sugar, molasses and rum, while non-traditional goods include non-metallic products, chemicals and petroleum products. (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020)

Figure 2: Products Offered (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020)

Product	Definition	Relation to FGP
TRADITIONAL		
Sugar	Sugars are produced commercially. For example, sucrose (table sugar) is produced from sugar cane and sugar beets; brown sugar, molasses, and cane sugar are produced from sugar cane; Currently, molasses, a by-product of sugar production, is utilized in the production of rum and another by-product, bagasse is used as fuel in the factories. (IFT Food Facts, 2019)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Sugar Industry**] , which allow its compliance with ISO 30414:2018
Other Products	Currently, molasses, a by-product of sugar production, is utilized in the production of rum and another by-product, bagasse is used as fuel in the factories. (IFT Food Facts, 2019)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Other Products Industry**] , which allow its compliance with ISO 30414:2018
Rum	Rum, distilled liquor made from sugarcane products, usually produced as a by-product of sugar manufacture. It includes both the light-bodied rums, typified by those of Cuba and Puerto Rico, and the heavier and fuller-flavoured rums of Jamaica. (Encyclopedia Brittanica, n.d.)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Rum Industry**] , which allow its compliance with ISO 30414:2018
NON-TRADITIONAL		
Processed Foods	Any substance whether processed, semi-processed or raw, that is intended for human consumption. NOTE: This includes drinks, chewing gum and any substance which has been used in the manufacture, preparation or treatment of food, but does not include cosmetics, tobacco or substances used only as drugs. (Bureau of Standards Jamaica, 2021)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Processed Foods Industry**] , which allow its compliance with ISO 30414:2018
Beverages & Tobacco (excluding Rum)	Enterprises within food, beverages and tobacco processing activities not only generate products for final consumption (many of which are essential daily products) but also intermediate products for other manufacturing activities (such as oils, fats and sugars). (Europa)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Beverages & Tobacco (excluding Rum) Industry**] , which allow its compliance with ISO 30414:2018
Crude Materials	Means raw materials other than oil, gas and coal, which means in particular metals, precious stones, wood, hides and skins, etc. (Law Insider, n.d.)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Crude Materials Industry**] , which allow its compliance with ISO 30414:2018

Note: Information obtained from (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020) Table: Own Work

Figure 3: Products Offered (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020)

Product	Definition	Relation to FGP
NON-TRADITIONAL		
Mineral Fuels	The nonmetallic mineral product manufacturing subsector is part of the manufacturing sector. The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications. (U.S. Bureau of Labor Statistics, n.d.)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Mineral Fuels Industry**] , which allow its compliance with ISO 30414:2018
Animals & Vegetable Oils & Fats	Fat is a generic term for lipids, a class of compounds in biochemistry. Vegetable oil is the fat extracted from plant sources. We may be able to extract oil from other parts of a plant, but seeds are the main source of vegetable oil. Typically, vegetable oils are used in cooking and for industrial uses. Compared to water, oils and fats have a much higher boiling point. Animal fats come from different animals. Tallow is beef fat and lard is pork fat. There is also chicken fat, blubber (from whales), cod liver oil, and ghee (which is a butterfat). Animal fats tend to have more free fatty acids than vegetable oils do. Chemically, fats and oils are also called "triglycerides." They are esters of glycerol, with a varying blend of fatty acids. (Penn State University, n.d.)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Animals & Vegetable Oils & Fats Industry**] , which allow its compliance with ISO 30414:2018
Chemicals (Including Ethanol)	Chemical substances exist as solids, liquids, gases, or plasma, and may change between these phases of matter with changes in temperature or pressure and time. Ethanol, also called alcohol, ethyl alcohol and grain alcohol, is a clear, colorless liquid and an ingredient in alcoholic beverages like beer, wine or brandy. Ethanol is a natural by-product of plant fermentation and can be produced through the hydration of ethylene. (Chemical Safety Facts, 2022)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Chemicals (Including Ethanol Industry**] , which allow its compliance with ISO 30414:2018
Agro-Processing	Agro-processing includes the manufacture of food-based products. The area of agro-processing (sugar, rum, processed foods, beverages & tobacco, etc.) (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Agro-Processing Industry**] , which allow its compliance with ISO 30414:2018
Manufactured Goods	Manufactured goods are produced by "the application of technical know-how and process equipment (embedded knowledge) together with capital and labour leading to the transformation, with clear value addition, of locally available or imported raw materials and intermediate inputs into final or intermediate products for domestic and export markets". (Manufacturing Task Force)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Manufactured Goods Industry**] , which allow its compliance with ISO 30414:2018
Machinery & Transport Equipment	Best prospects include rims, shock absorbers, clutch and brake parts, tires, and general accessories. (Trade.Gov, 2022)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Machinery & Transport Equipment Industry**] , which allow its compliance with ISO 30414:2018
Other	Other Equipment is intangible property such as computer software and software licenses, equipment specifically designed or manufactured for Borrower, other intangible property, limited use property and other similar property and soft costs approved by the Bank, including sales tax, freight and installation expenses. (Law Insider, n.d.)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Other Equipment Industry**] , which allow its compliance with ISO 30414:2018
Apparel	The apparel manufacturing subsector is part of the manufacturing sector. Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment), and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing. (U.S. Bureau of Labor	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Apparel Industry**] , which allow its compliance with ISO 30414:2018
Other Light Manufacturing	The production of small consumer goods that uses moderate amounts of partially processed materials to produce items of relatively higher value. In Jamaica, electronics and medical devices are identified as key target sub-industry of light manufacturing. Light manufacturing includes electrical, metal, paper, chemical products and building tools (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020)	The FGP delivers a Project Management Plan for the Development of Human Resource Management System Guidelines to the Jamaican manufacturing sector [**Other Light Manufacturing Industry**] , which allow its compliance with ISO 30414:2018

Note: Information obtained from (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020) Table: Own Work

2.2 Project Management concepts

The most basic project management concept is knowing what a project is and when work is not a project. While there are projects in every industry, there may not be formal project management or project-related job titles used. A lack of formal titles does not mean the work is not a project. The Project Management Institute (PMI) defines a project as: “a temporary effort to create value through a unique product, service or result” (Project Management Academy, 2022). The project management concepts such as project, project management, project life cycle, knowledge areas, project management processes, process groups, and other applicable project management-related concepts will be further discussed in the ensuing sections.

2.2.1 Project management principles

The Standard for Project Management identifies project management principles that guide the behaviours and actions of project professionals and other stakeholders who work on or are engaged with projects. According to (Project Management Institute, 2021), “the principles of Project Management are not prescriptive in nature. They are intended to guide the behavior of people involved in projects. They are broadly based so there are many ways individuals and organizations can maintain alignment with the principles”. The Project Management Principles are detailed below:

Figure 4: Project Management Principles (Project Management Institute, 2021)

PROJECT MANAGEMENT PRINCIPLES	DEFINITION	RELATION TO FGP
Stewardship	Stewards act responsibly to carry out activities with integrity, care, and trustworthiness while maintaining compliance with internal and external guidelines. They demonstrate a broad commitment to financial, social, and environmental impacts of the projects they support. (Project Management Institute, 2021)	The FGP will be stewarded in order to maintain compliance with the "Regulations for Final Graduation Project"
Team	Project teams are made up of individuals who wield diverse skills, knowledge, and experience. Project teams that work collaboratively can accomplish a shared objective more effectively and efficiently than individuals working on their own. (Project Management Institute, 2021)	The development of the FGP will incorporate members of the University's governance hierarchy which will provide oversight and guidance.
Stakeholders	Stakeholders influence projects, performance, and outcomes. Engage stakeholders proactively and to the degree needed to contribute to project success and customer satisfaction. (Project Management Institute, 2021)	The various Stakeholders will be identified, to include the Tutor, the Reviewer, the Examining Board and the Academic Advisor.
Value	Value is the ultimate indicator of project success. Continually evaluate and adjust project alignment to business objectives and intended benefits and value. (Project Management Institute, 2021)	The Outcome of the Project, as identified by the FGP will add value to the Manufacturing Sector in Jamaica, and to the Project Management profession as a whole.
Systems Thinkings	Systems thinking entails taking a holistic view of how project parts interact with each other and with external systems. Recognize, evaluate, and respond to the dynamic circumstances within and surrounding the project in a holistic way to positively affect project performance. (Project Management Institute, 2021)	The development of a Project Management Plan for the FGP will ensure that systems thinking is demonstrated throughout the project.
Leadership	Leaders demonstrate desired behavior in areas of honesty, integrity, and ethical conduct. Effective leadership promotes project success and contributes to positive project outcomes. Demonstrate and adapt leadership behaviors to support individual and team needs (Project Management Institute, 2021)	The FGP will be developed in accordance with Ethics of the University, and Project Management Ethics.
Tailoring	Project success is based on adapting to the unique context of the project to determine the most appropriate methods of producing the desired outcomes. Design the project development approach based on the context of the project, its objectives, stakeholders, governance, and the environment using "just enough" process to achieve the desired outcome while maximizing value, managing cost, and enhancing speed (Project Management Institute, 2021)	The FGP will document any project management concepts which are tailored to effectively develop the Project Management Plan.
Quality	Project quality entails ensuring project processes are appropriate and as effective as possible. Maintain a focus on quality that produces deliverables that meet project objectives and align to the needs, uses, and acceptance requirements set forth by relevant stakeholders. (Project Management Institute, 2021)	Care will be taken in order to ensure that the FGP is developedin accordance with UCI's guidelines, APA and Project Management guidelines.
Risk	Risks can be positive (opportunities) or negative (threats). Continually evaluate exposure to risk, both opportunities and threats, to maximize positive impacts and minimize negative impacts to the project and its outcomes. (Project Management Institute, 2021)	The risks have been identified within the Project Management Plan. Care will be taken to manage risks throughout the FGP development.
Complexity	Complexity is the result of human behavior, system interactions, uncertainty, and ambiguity. Continually evaluate and navigate project complexity so that approaches and plans enable the project team to successfully navigate the project life cycle. (Project Management Institute, 2021)	The complexities of the project have been identified in the FGP.
Adaptability & Resilience	Adaptability is the ability to respond to changing conditions. Resiliency is the ability to absorb impacts and to recover quickly from a setback or failure. Build adaptability and resiliency into the organization's and project team's approaches to help the project accommodate change, recover from setbacks, and advance the work of the project. (Project Management Institute, 2021)	All corrections to the FGP are embraced, and acted upon to ensure a better quality output.
Change	Change can originate from internal influences or external sources. Prepare those impacted for the adoption and sustainment of new and different behaviors and processes required for the transition from the current state to the intended future state created by the project outcomes. (Project Management Institute, 2021)	Any changes to the FGP are embraced, and acted upon to ensure a better quality output.

Note: Information obtained (Project Management Institute, 2021)Table: Own Work

2.2.2 Project Management Domains

A project performance domain is a group of related activities that are critical for the effective delivery of project outcomes. Eight (8) performance domains form an integrated system to enable the successful delivery of the project's intended outcomes. (Project Management Institute, 2021)

Figure 5: Project Management Domains (Project Management Institute, 2021)

PROJECT MANAGEMENT DOMAINS	DEFINITION	RELATION TO FGP
Delivery	The Delivery Performance Domain addresses activities and functions associated with delivering the scope and quality that the project was undertaken to achieve. (Project Management Institute, 2021)	The development of the FGP under guidance, will ensure that there is a final acceptable outcome or delivery.
Development Approach and Life Cycle	The Development Approach & Life Cycle Performance Domain addresses activities and functions associated with the development approach, cadence and life cycle phases of the project (Project Management Institute, 2021)	This Project is an Iterative or Adaptive Lifecycle, as it allows for corrections to be made, and then the presentation of the corrected aspect, before the final deliverable.
Measurement	The Measurement Performance Domain addresses activities and functions associated with assessing project performance and taking appropriate actions to maintain acceptable performance. (Project Management Institute, 2021) (Project Management Institute, 2021)	This aspect of the FGP speaks to the corrective actions taken, after identification of any errors.
Planning	The Planning Performance Domain addresses activities and functions associated with the initial, ongoing, and evolving organization and coordination necessary for delivering project deliverables and outcomes. (Project Management Institute, 2021)	The Research is ongoing, and evolves at each stage, during the FGP process.
Project Work	The Project Work Performance Domain addresses activities and functions associated with establishing project processes, managing physical resources, and fostering a learning environment. (Project Management Institute, 2021)	All project processes will be identified within the Project Management Plan.
Stakeholders	The Stakeholder Performance Domain addresses activities and functions associated with stakeholders (Project Management Institute, 2021)	The various Stakeholders will be identified, to include the Tutor, the Reviewer, the Examining Board and the Academic Advisor.
Team	The Team Performance Domain addresses activities and functions associated with the people who are responsible for producing project deliverables that realize business outcomes. (Project Management Institute, 2021)	The development of the FGP will incorporate members of the University's governance hierarchy which will provide oversight and guidance.
Uncertainty	The Uncertainty Performance Domain addresses activities and functions associated with risk and uncertainty. (Project Management Institute, 2021)	Any area of uncertainty is clarified

Note: Project Management Domains: 2023, Information taken from (Project Management Institute, 2021) Table: Own Work

2.2.3 Predictive, Adaptive and hybrid projects

The three main methods for developing software are predictive (waterfall), adaptive, and hybrid. The strategy chosen will depend on the specific requirements of the project because each tactic has advantages and disadvantages of its own. Each project's unique requirements and constraints will determine whether to use an Agile or Predictive approach to software development. (Iqbal, 2023)

The Predictive is best suited for projects with well-defined and stable requirements, where the scope of the project is clear and unlikely to change. This approach is often used in projects with a fixed budget and timeline, such as construction projects or hardware development. (Iqbal, 2023)

While client participation and quick delivery of usable software are priorities, Agile is best suited for projects with quickly changing or poorly specified objectives. Agile is frequently employed in software development projects where there is uncertainty about the end product and a need for the development team to react fast to changes in requirements or technology. (Iqbal, 2023)

In Predictive strategy, a precise plan is created and adhered to throughout the duration of the project. The timetable, budget, and deliverables are all specified and determined from the beginning of the project. This method is ideal for projects with well-defined needs and stable environments. (Iqbal, 2023)

The Agile approach, also known as adaptive strategy, emphasizes flexibility and adaptation. Requirements and project plans are constantly amended and reevaluated based on feedback from stakeholders and changes in the development environment. This

approach works well for projects with a high degree of ambiguity and quickly changing requirements. (Iqbal, 2023)

The hybrid strategy, as its name suggests, “combines elements from both predictive and adaptive methods. It requires creating a broad strategy at the project's outset while allowing for flexibility and adjustment as it progresses. This approach works best for initiatives that need to strike a balance between predictability and flexibility”. (Iqbal, 2023)

Figure 6 : Predictive, Adaptive and Hybrid Projects (Project Management Institute, 2017)

PREDICTIVE ADAPTIVE & HYBRID PROJECTS	DEFINITION	RELATION TO FGP
Adaptive Approach	A project life cycle that is iterative or incremental (Project Management Institute, 2017)	This Research is an adaptive approach in the sense that, corrections are made and increments of the project delivered, until the final deliverable.
Hybrid Approach	A combination of two or more agile and non-agile elements, having a non-agile end result. (Project Management Institute, 2017)	The end-result of the Project could be seen to be agile.
Predictive Approach	" A form of project life cycle in which the project scope, time, and cost are determined in the early phases of the life cycle" (Project Management Institute, 2017)	The Project Time, Scope and Cost are determined at the outset of the project. However, the project work is delivered in an adaptive way.

Note: Predictive, Adaptive and Hybrid Projects: 2023, Information taken (Project Management Institute, 2017) Table: Own Work

2.2.4 Project Management

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. Project management is accomplished

through the appropriate application and integration of the project management processes identified for the project. Project management enables organizations to execute projects effectively and efficiently. (Project Management Institute, 2017). The following table shows the main project management concepts, definitions and their relation to the FGP.

Figure 7: Project Management Concepts (Project Management Institute, 2021)

MAIN PROJECT CONCEPTS	DEFINITION	RELATION TO FGP
Adaptive Approach	A project life cycle that is iterative or incremental (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Assumptions	A factor in the planning process that is considered to be true, real, or certain, without proof or demonstration (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Constraints	A limiting factor that affects the execution of a project, program, portfolio, or process (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Cost Baseline	Contractor and materials prices can change frequently during the delivery of a project. These changes can occur because of fluctuating materials and labor prices created by the external economic environment and need to be incorporated into the cost baseline. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Deliverable	"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 Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Human Resource Management	Human Resource Management (HRM) is the practice of recruiting, hiring, deploying and managing an organization's employees. (ISO, n.d.)	This concept has been taken into consideration during the development of the FGP
Hybrid Approach	A combination of two or more agile and non-agile elements, having a non-agile end result. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Industry	An industry is a group of companies that are related based on their primary business activities. In modern economies, there are dozens of industry classifications. Industry classifications are typically grouped into larger categories called sectors. (Gorton, 2022)	This concept has been taken into consideration during the development of the FGP
Milestone	"A milestone is a significant point or event in a project. A milestone list identifies all project milestones and indicates whether the milestone is mandatory, such as those required by contract, or optional, such as those based on historical information. Milestones have zero duration because they represent a significant point or event." (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Mission Statement	A mission statement is a short action-based declaration that describes the purpose of an organization. Mission statements explain what companies do and are a very important part of their culture, along with the core values and vision statement. Mission statements are an internal guide for organizations, but they also need to be appealing to customers. (Westland, 2022)	This concept has been taken into consideration during the development of the FGP
Objective	Something toward which work is to be directed, a strategic position to be attained, a purpose to be achieved, a result to be obtained, a product to be produced, or a service to be performed. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Organizational Structure	An organizational structure that has many levels, a rigid reporting structure, and substantial bureaucracy frequently uses a predictive approach. Projects that use adaptive methods tend to have a flat structure and may operate with self-organizing project teams. (Project Management Institute, 2021)	This concept has been taken into consideration during the development of the FGP
Portfolio	These are: Projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Predictive Approach	" A form of project life cycle in which the project scope, time, and cost are determined in the early phases of the life cycle" (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Program	Related projects, subsidiary programs, and program activities that are managed in a coordinated manner to obtain benefits not available from managing them individually. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project	A temporary endeavor undertaken to create a unique product, service, or result. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Charter	This is defined as a document issued by the Project Sponsor that formally authorizes the existence of a Project and provides the Project Manager with the authority to apply organizational resources to project activities. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Communications Management Plan	Project Communications Management includes the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and ultimate disposition of project information. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Cost Management Plan	Project Cost Management includes the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so the project can be completed within the approved budget. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Integration Management Plan	Project Integration Management includes the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Life Cycle	The series of phases that a project passes through from its start to its completion. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP

Note: Project Management Concepts: 2023, Information taken (Project Management Institute, 2021)Table: Own Work

Figure 8: Project Management Concepts (Cont'd) (Project Management Institute, 2021)

MAIN PROJECT CONCEPTS	DEFINITION	RELATION TO FGP
Project Management	Project management is the use of specific knowledge, skills, tools and techniques to deliver something of value to people. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Management Knowledge Areas	The Project Management Knowledge Areas are fields or areas of specialization that are commonly employed when managing projects. A Knowledge Area is a set of processes associated with a particular topic in project management. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Management Plan	This is defined as the document that describes how the Project will be Executed, Monitored, Controlled. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Management Process Groups	A Project Management Process Group is a logical grouping of project management processes to achieve specific project objectives. Process Groups are independent of project phases. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Manager	The project manager is responsible for providing recommendations and oversight to keep the project business case, project management plan, project charter, and project benefits management plan success measures in alignment with one another and with the goals and objectives of the organization. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Procurement Management Plan	Project Procurement Management includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Quality Management Plan	Project Quality Management includes the processes for incorporating the organization's quality policy regarding planning, managing, and controlling project and product quality requirements, in order to meet stakeholders' expectations. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Resource Management Plan	Project Resource Management includes the processes to identify, acquire, and manage the resources needed for the successful completion of the project. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Risk Management Plan	Project Risk Management includes the processes of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk on a project. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Schedule Management Plan	Project Schedule Management includes the processes required to manage the timely completion of the project. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Scope Management Plan	Project Scope Management includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Sponsor	The project sponsor is generally accountable for the development and maintenance of the project business case document. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Project Stakeholder Management Plan	Project Stakeholder Management includes the processes required to identify the people, groups, or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Regenerative Development	Regenerative development is the use of resources to improve society's wellbeing in a way that builds the capacity of the support systems needed for future growth. What sustainable development is to traditional economic development, regenerative development is to sustainable development. (Gabel, Regenerative Development: Going Beyond Sustainability, 2015)	This concept has been taken into consideration during the development of the FGP
Resource Management Plan	The resource management plan has information on which resources will be purchased or leased, along with any assumptions or constraints that would influence the procurement. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Scope Baseline	The project WBS and deliverables documented in the scope baseline are considered when performing procurement activities. Any one or all of these may change during the procurement process. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Scope Creep	The uncontrolled expansion to product or project scope without adjustments to time, cost, and resources. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Sustainable Development	The use of resources to improve society's wellbeing in a way that does not destroy or undermine the support systems needed for future growth. (Gabel, Regenerative Development: Going Beyond Sustainability, 2015)	This concept has been taken into consideration during the development of the FGP
Tools	Something tangible, such as a template or software program, used in performing an activity to produce a product or result. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Vision Statement	It is essential that everyone is aware of the project Vision and Objectives. The Vision and Objectives are communicated throughout the Project. This includes referencing the intended outcomes when the project team is engaged in making decisions and solving problems. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP
Work Breakdown Structure (WBS)	The WBS is a foundational building block to initiating, planning, executing, and monitoring and controlling processes that are used to manage projects. (Project Management Institute, 2017)	This concept has been taken into consideration during the development of the FGP

Note: Project Management Concepts: 2023, Information taken (Project Management Institute, 2021)Table: Own Work

2.2.5 Project Management Knowledge Areas and Processes

The Project Management Knowledge Area is defined as, "an identified area of project management defined by its knowledge requirements and described in terms of its component processes, practices, inputs, outputs, tools, and techniques (Project Management Institute, 2017). The following table outlines the knowledge areas, and how they relate to the FGP deliverables.

Figure 9 Project Management Knowledge Areas **(Project Management Institute, 2023)**

PROJECT MANAGEMENT KNOWLEDGE AREAS	Project Communications Management Plan	Project Cost Management Plan	Project Integration Management Plan	Project Procurement Management Plan	Project Quality Management Plan	Project Resource Management Plan	Project Risk Management Plan	Project Schedule Management Plan	Project Scope Management Plan	Project Stakeholder Management Plan
DEFINITION	Project Communications Management includes the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and ultimate disposition of project information. (Project Management Institute, 2017)	Project Cost Management includes the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so the project can be completed within the approved budget. (Project Management Institute, 2017)	Project Integration Management includes the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups. (Project Management Institute, 2017)	Project Procurement Management includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team. (Project Management Institute, 2017)	Project Quality Management includes the processes for incorporating the organization's quality policy regarding planning, managing, and controlling project and product quality requirements, in order to meet stakeholders' expectations. (Project Management Institute, 2017)	Project Resource Management includes the processes to identify, acquire, and manage the resources needed for the successful completion of the project. (Project Management Institute, 2017)	Project Risk Management includes the processes of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk on a project. (Project Management Institute, 2017)	Project Schedule Management includes the processes required to manage the timely completion of the project. (Project Management Institute, 2017)	Project Scope Management includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. (Project Management Institute, 2017)	Project Stakeholder Management includes the processes required to identify the people, groups, or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively. (Project Management Institute, 2017)
RELATION TO FGP	The FGP will facilitate the development of the Project Management Plan in order: To develop the Communications Management Plan to 'include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	The FGP will facilitate the development of the Project Management Plan in order: To develop the Cost Management Plan 'to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget.	The FGP will facilitate the development of the Project Management Plan in order: To develop the Integration Management Plan "to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	The FGP will facilitate the development of the Project Management Plan in order: To develop the Procurement Management Plan 'to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team" (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	The FGP will facilitate the development of the Project Management Plan in order: To develop the Quality Management Plan 'to include the processes for incorporating the industry's quality policy regarding planning, managing, and controlling project and product quality requirements" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder's expectations.	The FGP will facilitate the development of the Project Management Plan in order: To develop the Resource Management Plan 'to include the processes to identify, acquire and manage the resources needed to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018	1. To develop the Risk Management Plan 'to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	The FGP will facilitate the development of the Project Management Plan in order: To develop the Schedule Management Plan 'to include the processes required to manage the timely completion" (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	The FGP will facilitate the development of the Project Management Plan in order: To develop the Scope Management Plan 'to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	The FGP will facilitate the development of the Project Management Plan in order: To develop the Stakeholder Management Plan 'to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact" (Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.

Note: Project Management Knowledge Areas: 2023, Information (Project Management Institute, 2017) Table: Own Work

Project Management Processes

Project Management Processes, are defined as, "a systematic series of activities directed toward causing an end result where one or more inputs will be acted upon to create one or more outputs. A logical grouping of project management inputs, tools and techniques, and outputs. The Project Management Process Groups include Initiating, Planning, Executing, Monitoring and Controlling, and Closing. Project Management Process Groups are not project phases. (Project Management Institute, 2017). The following Table highlights the various process groups below:

Figure 10 Project Management Processes (Project Management Institute, 2023)

PROJECT MANAGEMENT PROCESSES	DEFINITION	RELATION TO FGP
Closing	The process(es) performed to formally complete or close a project, phase, or contract. (Project Management Institute, 2017)	This section will be documented according to Project Management Institute's standard for Project Management, during the ddevelopment of the FGP and the Project Management Plan.
Executing	The process(es) performed to complete the work defined in the project management plan to satisfy the project requirements. (Project Management Institute, 2017)	This section will be documented according to Project Management Institute's standard for Project Management, during the ddevelopment of the FGP and the Project Management Plan.
Initiating	The process(es) performed to define a new project or a new phase of an existing project by obtaining authorization to start the project or phase. I(Project Management Institute, 2017)	This section will be documented according to Project Management Institute's standard for Project Management, during the ddevelopment of the FGP and the Project Management Plan.
Monitoring and Controlling	The process(es) required to track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes. (Project Management Institute, 2017)	This section will be documented according to Project Management Institute's standard for Project Management, during the ddevelopment of the FGP and the Project Management Plan.
Planning	The process(es) required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve.(Project Management Institute, 2017)	This section will be documented according to Project Management Institute's standard for Project Management, during the ddevelopment of the FGP and the Project Management Plan.

Note: Project Management Concepts: 2023, Information taken (Project Management Institute, 2021)Table: Own Work

2.2.6 Project life cycle

The project life cycle determines the series of phases that a project passes through from its inception to the end of the project, whilst the development approach defines whether

waterfall, iterative, adaptive, agile, or a hybrid development approach will be used. (Project Management Institute, 2017)

Project life cycles can range along a continuum from predictive approaches at one end to adaptive or agile approaches at the other. In a predictive life cycle, the project deliverables are defined at the beginning of the project and any changes to the scope are progressively managed. In an adaptive or agile life cycle, the deliverables are developed over multiple iterations where a detailed scope is defined and approved for each iteration when it begins.

Projects with adaptive life cycles use backlogs (including product requirements and user stories) to reflect their current needs.

In an adaptive or agile life cycle, the sponsor and customer representatives should be continuously engaged with the project to provide feedback on deliverables as they are created and to ensure that the product backlog reflects their current needs. Two processes (Validate Scope and Control Scope) are repeated for each iteration. On the contrary, in a predictive project, Validate Scope occurs with each deliverable or phase review and Control Scope is an ongoing process.

In this research, we will be utilizing an iterative development approach. However, we will display a Project Lifecycle that gives a comparison of the adaptive, iterative and predictive cycles.

Similarities between Project Life Cycles

The following table shows the relation between the different project lifecycles.

Figure 11 Similarities between Project Life Cycles **(Sonkiya, 2023)**

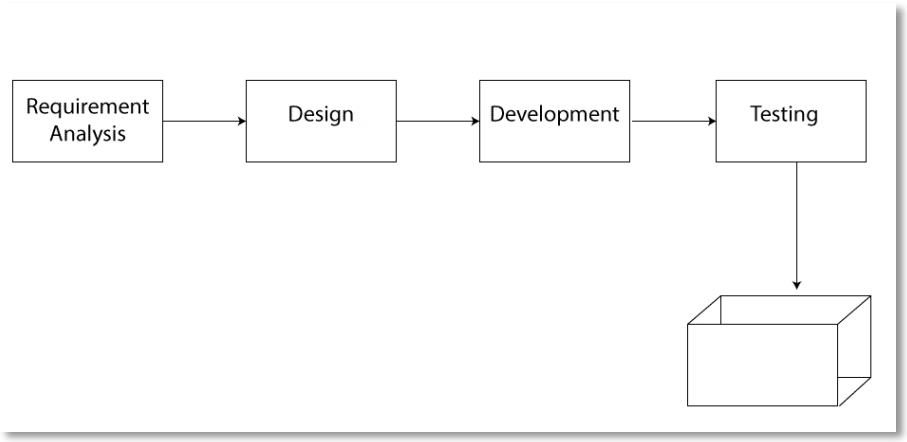
Particular	Predictive	Iterative	Adaptive
Stages/ Phases	Can happen sequentially or overlap	Can happen sequentially or overlap	Can happen sequentially or overlap
Stages/Phases	Planning/ Analysis/ Design / Code/ testing all takes place	Planning/ Analysis/ Design/ Code/ testing all takes place	Planning/ Analysis/ Design/ Code/ testing all takes place
Scope	Defined upfront at the beginning	Defined for upcoming iteration and high-level vision for the rest	The scope is set in the form of features from which features are picked for the current iteration
Change	At initial phases/stages can be accommodated. Cost overruns as late it comes up during project Lifecycle	Taken care with less cost impact during the planning of the next iteration	Taken care even more rapid changes every 2-4 weeks with less cost impact during the planning of the next iteration
Risk	The risk of change/ feedback is huge at later stages/ phases	The risk of change/ feedback is less as iterations reduce it naturally	The risk of change/ feedback is least as iterations are too small and reduce it naturally
Customer Feedback	Customer feedback is received at the end of the project only and customer involvement is more at the beginning and end	Customer feedback is received at the end of each iteration with which customers are involved multiple times during the project	Customer feedback is received at the end of each rapid iteration. Customers are involved/engaged continuously
Complexity	Used for projects where the product to be delivered is well understood and complexities are not there to handle	Used where a change in objectives/ scope need to be managed and complexity reduction is required as the project progresses	Used in a rapidly changing environment, where scope/ requirements are difficult to define in advance and possible to define small increments
Delivery/Value	Delivery happens at the end only once and the customer gets value at the end	Delivery happens at the end of each iteration and customer gets value early in the project	Delivery happens very rapidly after every 2-4 weeks and customer get the value delivered very frequently

Note: Adapted from Project Management Life Cycle-Iterative & Adaptive iZenBridge, 2023

Predictive Life Cycle

The following gives a pictorial view of the Predictive Life Cycle (without the feedback loop)

Figure 12 Predictive Life Cycle **(Sonkiya, 2023)**

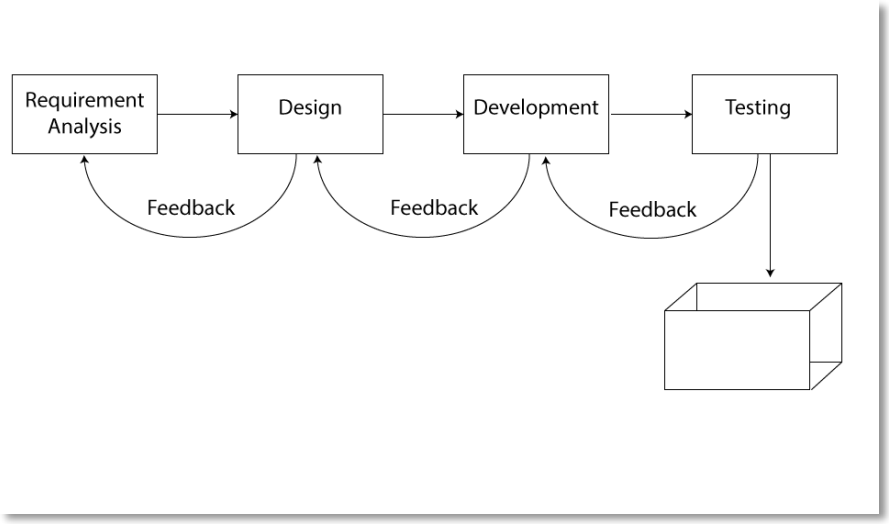


Note: Adapted from Project Management Life Cycle-Iterative & Adaptive iZenBridge, 2023

Predictive Life Cycle (including Feedback Loop)

The following gives a pictorial view of the Predictive Life Cycle (without the feedback loop)

Figure 13: Predictive Life Cycle (including Feedback Loop) (Sonkiya, 2023)

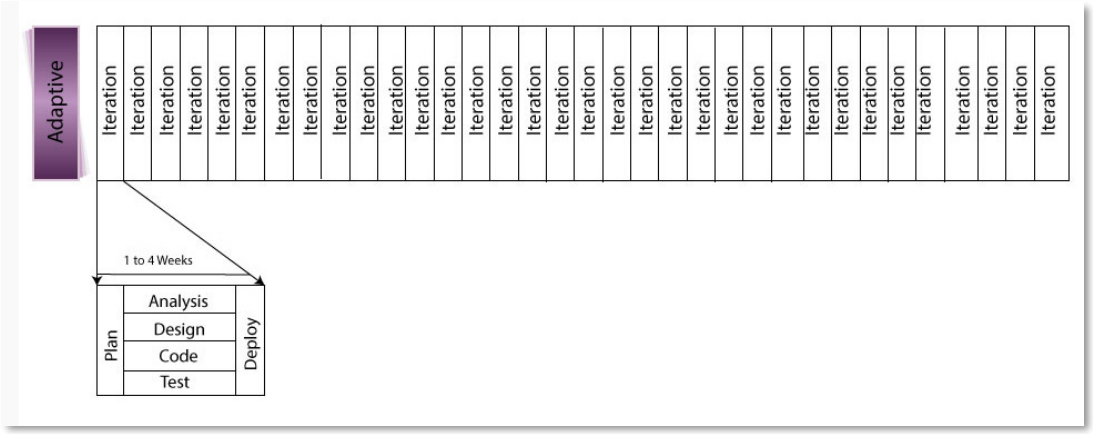


Note: Adapted from Project Management Life Cycle-Iterative & Adaptive iZenBridge, 2023

Adaptive Life Cycle

The following gives a pictorial view of the Adaptive Life Cycle

Figure 14: Adaptive Life Cycle (Sonkiya, 2023)

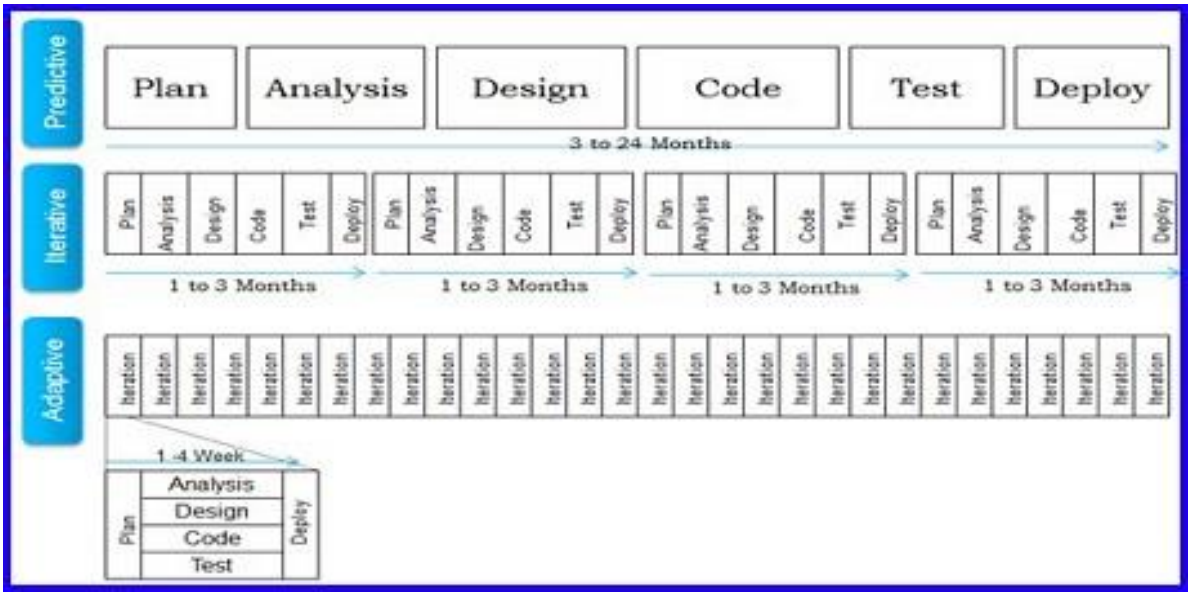


Note: Adapted from Project Management Life Cycle-Iterative & Adaptive iZenBridge, 2023

Predictive, Iterative and Adaptive Life Cycle comparison

The following gives a comparative view of the Predictive, Iterative and Adaptive Life Cycle

Figure 15: Predictive and Adaptive Life Cycle comparison (Sonkiya, 2023)



Note: Adapted from Project Management Life Cycle-Iterative & Adaptive iZenBridge, 2023

2.2.7 Company strategy, portfolios, programs and projects

Strategy

According to (Reddy, 2018), A strategy is a long-term plan that a company creates in order to reach the desired, future state. A strategy includes the company's goals and objectives, the type of products/services, the customers it will serve and the markets which it will sell to in order to achieve profits.

Jamaica's National Five-Year Manufacturing Growth Strategy

In July 2020, the Ministry of Industry, Commerce, Agriculture and Fisheries, crafted the "National Five-Year Manufacturing Growth Strategy for Jamaica" in a bid to: (1) Articulate the challenges and opportunities for growth in the local manufacturing industry; (2) Outline the initiatives that are essential to propelling the manufacturing industry into realizing greater growth and national impact; and to (3) Create a national action plan to grow the local manufacturing industry over the next 5 years. The key expected impact of the Strategy, therefore, will be to grow the manufacturing sector's contribution to GDP, moving manufacturing output from JMD$66 billion in 2018 to JMD$81 billion by December 2025. (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020)

Portfolios, Programs and Projects

Some organizations may employ the use of a project portfolio to effectively manage multiple programs and projects that are underway at any given time. Program and project management focus on doing programs and projects the "right" way; and Portfolio

management focuses on doing the “right” programs and projects. (Project Management Institute, 2017)

Portfolio

A portfolio is defined as projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives**. Some of the identified portfolios from the manufacturing strategy are** (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020):

- Develop an Apprenticeship Programme for Manufacturing
- Develop Core Training Curriculum for Manufacturing
- Expand the Science, Technology, Engineering and Math (STEM) Programme

Programs

A program is defined as a group of related projects, subsidiary programs, and program activities managed in a coordinated manner to obtain benefits not available from managing them individually. Programs are not large projects. A very large project may be referred to as a megaproject. As a guideline, megaprojects cost US$1billion or more, affect 1 million or more people, and run for years. (Project Management Institute, 2017).

Some of the identified programmes from the manufacturing strategy are (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020):

- Capacity Building Programmes: to promote and encourage training programmes within the industry designed to provide knowledgeable personnel to meet the needs of the industry.

- Training will be conducted in areas such as standards and quality, market intelligence, productivity among others.
- Capacity support will be provided by the JMEA as a partner for the Development Bank of Jamaica (DBJ)'s Voucher for Technical Assistance (VTA) Programme in areas such as Mentorship and Coaching, Business Plan, Account Management and Marketing and Promotional Plan development.
- Cluster Development Programmes: to develop and manage clusters as a model for growth, in sectors such as the castor, agro-processing industry and light manufacturing.
- Execute Strategic Partnerships: to partner with key government agencies and private sector to drive skills development, competitive financing and factory space allocation for the industry. The Association will continue to develop partnerships with financial institutions for tailored banking products/solutions for the manufacturing sector.

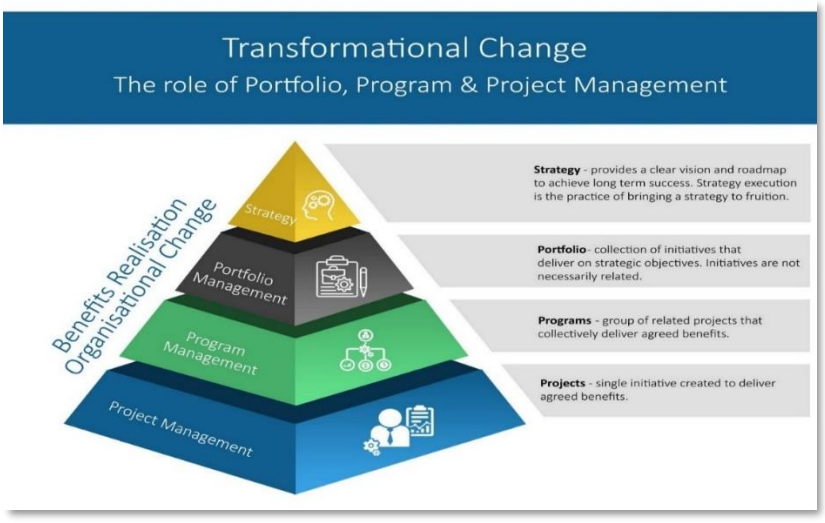
Projects

A project is a temporary endeavor undertaken to create a unique product, service or result. Projects are undertaken to fulfill objectives by producing deliverables A project may be managed in three separate scenarios: as a stand-alone project (outside of a portfolio or program), within a program, or within a portfolio. Project managers interact with portfolio and program managers when a project is within a program or portfolio. For example, multiple projects may be needed to accomplish a set of goals and objectives for an organization. In those situations, projects may be grouped together into a program.

Some of the identified projects within the Manufacturing Strategy are (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020)**:**

- Provide incubators for small and medium manufacturers
- Rationalize and reorganize border agencies and their requirements [Implementing Entity: Ministry of industry, Commerce, Agriculture and Fisheries (MICAF)]
- Expedite the required legislative changes [Implementing Entities: Relevant Ministry(ies) and the Office of the Chief Parliamentary Counsel (CPC)] Establish and institute an apprenticeship programme across all tertiary and vocational training institutions.
- Establishment a partnership between HEART/NTA, the Ministry of Education & the Jamaica Manufacturers and Export Association (JMEA)
- Expedite the adoption and implementation of the regulations for the Public Procurement Act

Figure 16: Company, Strategy, Portfolios, Programs and Projects (Change Success, n.d.)



Note: Adapted Portfolio, Program and Project Management – 3PM, Change Success, 2023

Figure 17: Company Strategy, Portfolios, Programs and Projects

Components	Details	In Relation to FGP
Strategy	To become a first class leader in the manufacture of goods in the Caribbean region, and a global competitor, achieving world class ISO certification standards that will help the industry to increase production and sales; adopt new and relevant technologies that will create more process automation, and better capture, reporting and management of human capital, within the next three (3) years.	To develop an FGP which documents relevant research, and puts forward achievable objectives to address the situation.
Portfolio	"To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018".	To ensure that the delivered Project Management Plan embraces the Vison 2030 Manufacturing Strategy in Jamaica.
Program	Human Resources Management within the Manufacturing Sector	To put forward a cohesive plan that can be utilized within any business within the manufacturing Sector.
Project	To develop a Project Management Plan framed within the standards of Regenerative Development that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018. To develop a Project management Plan framed within the standards of the Project Management Institute "to document the processes, practices, inputs, tools and techniques" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	To apply the use of project management specific knowledge, skills, tools and techniques to deliver a final Project Management Plan that will allows the Manufacturing Sector in Jamaica to achieve ISO Certification in ISO 30414:2018.

Note: Company Strategy, Portfolios, Programs and Projects: 2023, Table: Own Work

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

The following Table highlights the other applicable concepts/theories which are related to this research and its context.

Figure 18: Other Applicable Theory/Concepts related to Project Topic and Context

Theory/Concept	Definitions
Bibliography	An APA format bibliography is an alphabetical listing of all sources that might be used to write an academic paper, essay, article, or research paper—particularly work that is covering psychology or psychology-related topics. APA format is the official style of the American Psychological Association (APA). This format is used by many psychology professors, students, and researchers. (Cherry, 2022)
Board of Examiner	The Examining Committee that approves the FGP, after presentation and defense by the Student. (Universidad Para La Cooperacion Internacional, 2015)
Bureau of Standards	The Bureau of Standards Jamaica is a statutory body established by The Standards Act of 1969 to promote and encourage standardization in relation to commodities, processes and practices. The Bureau's portfolio includes ensuring compliance with The Standards Act (1968), The Processed Food Act (1959) and the Weights and Measures Act (1976). Other aspects of its mandate are implemented under The Trade Act (1955), The Customs Act (1941), The Petroleum (Quality Control) Regulations (1990) and The CARICOM Regional Organization for Standards and Quality Act (2005). (Jamaica Information Service, n.d.)
Constraints	A limiting factor that affects the execution of a project, program, portfolio, or process (Project Management Institute, 2017)
Contract Worker	Contract workers, or independent contractors, are generally hired for specific projects or services on a shorter-term basis. Contract workers are not expected to be offered long-term employment or benefits. The requirements for classifying an employee as a contractor include: Responsible for their own taxes; Use their own equipment and supplies; Provide an invoice upon completion of work (Himber, 2022)
Deliverable	"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 Institute, 2017)
Employee	An employee is a worker hired by an employer to do a specific job. Employers control how employees are paid, when employees work, and how employees work. In exchange, employees get benefits that contractors don't. (Heathfield, 2022)
Estate of the Matter	The Background description and current status of the problem and research done about it. (Universidad Para La Cooperacion Internacional, 2015)
Final Graduation Project (FGP)	The Final Graduation Project (FGP) is a theoretical and practical activity characterized by the formulation of the diagnosis of a problem and the approach of a proposed solution to specific issues (Universidad Para La Cooperacion Internacional, 2015)
Human Capital	The term human capital refers to the economic value of a worker's experience and skills. Human capital includes assets like education, training, intelligence, skills, health, and other things employers value such as loyalty and punctuality. As such, it is an intangible asset or quality that isn't (and can't be) listed on a company's balance sheet. Human capital is perceived to increase productivity and thus profitability. The more investment a company makes in its employees, the chances of its productivity and success become higher. (Kenton, 2022)
Human Capital Reporting (HCR)	Human Capital Reporting is reporting of valuation of human resource inside company, which usually consists intangible values. (ISO, n.d.)
Human Resource Management	Human Resource Management (HRM) is the practice of recruiting, hiring, deploying and managing an organization's employees. (ISO, n.d.)
Human Resource Management Systems	An HRMS, or human resources management system, is a suite of software applications used to manage human resources and related processes throughout the employee lifecycle. An HRMS enables a company to fully understand its workforce while staying compliant with changing tax laws and labor regulations (peoplegoal, 2021)
Industry	An industry is a group of companies that are related based on their primary business activities. In modern economies, there are dozens of industry classifications. Industry classifications are typically grouped into larger categories called sectors. (Gorton, 2022)
International Organization for Standardization (ISO)	"ISO is an independent, non-governmental international organization with a membership of 167 national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market relevant International Standards that support innovation and provide solutions to global challenges. (International Organization for Standardization, 2021)
ISO 30414:2018	Human Resource Management — Guidelines for internal and external human capital reporting. This document provides guidelines for internal and external human capital reporting (HCR). The objective is to consider and to make transparent the human capital contribution to the organization in order to support sustainability of the workforce. This document is applicable to all organizations, regardless of the type, size, nature or complexity of the business, whether in the public, private or voluntary sector, or a not-for-profit organization. (ISO, n.d.)
ISO Compliance	ISO compliance is achieved when an organization meets the requirements outlined in a specific standard developed by the International Organization for Standardization (ISO). ISO has developed thousands of standards that cover all areas of business. These ISO frameworks are used by organizations to embed internationally standardized business practices. (Nyhuis, 2022)
ISO Standards	Standards are the distilled wisdom of people with expertise in their subject matter and who know the needs of the organizations they represent – people such as manufacturers, sellers, buyers, customers, trade associations, users or regulators. (ISO, n.d.)

Note: Other Project Management Concepts: 2023, Table: Own Work

Figure 19: Other Applicable Theory/Concepts related to Project Topic and Context

Theory/Concept	Definitions
Key Performance Indicator (KPI)	A key performance indicator (KPI) is a measurable value that demonstrates how effectively a company is achieving key business objectives. Organizations use KPIs to evaluate their progress and success at reaching targets. (Klipfolio, n.d.)
Manufacture	The term manufacturing refers to the processing of raw materials or parts into finished goods through the use of tools, human labor, machinery, and chemical processing. (Kenton, 2022)
Mission Statement	A mission statement is a short action-based declaration that describes the purpose of an organization. Mission statements explain what companies do and are a very important part of their culture, along with the core values and vision statement. Mission statements are an internal guide for organizations, but they also need to be appealing to customers. (Westland, 2022)
Objective	Something toward which work is to be directed, a strategic position to be attained, a purpose to be achieved, a result to be obtained, a product to be produced, or a service to be performed. (Project Management Institute, 2017)
Organizational Structure	An organizational structure that has many levels, a rigid reporting structure, and substantial bureaucracy frequently uses a predictive approach. Projects that use adaptive methods tend to have a flat structure and may operate with self-organizing project teams. (Project Management Institute, 2021)
Regenerative Development	Regenerative development is the use of resources to improve society's wellbeing in a way that builds the capacity of the support systems needed for future growth. What sustainable development is to traditional economic development, regenerative development is to sustainable development. (Gabel, 2015)
Research Methodology	Your research methodology discusses and explains the data collection and analysis methods you used in your research. A key part of your thesis, dissertation, or research paper, the methodology chapter explains what you did and how you did it, allowing readers to evaluate the reliability and validity of your research and your dissertation topic. (McCombes & George, 2022)
Standards Development Work Programme	The BSJ's Standards Development Work Programme is published in order to meet the requirements specified in Annex 3 Code of Good Practice for the Preparation, Adoption and Application of Standards prepared by the World Trade Organization (WTO) in the Agreement on Technical Barriers to Trade (TBT). It was first published in April 1996 and is published twice each year, in April and October. (Bureau of Standards Jamaica, 2022)
Sustainable Development	The use of resources to improve society's wellbeing in a way that does not destroy or undermine the support systems needed for future growth. (Gabel, 2015)
Theoretical Framework	A theoretical framework is a foundational review of existing theories that serves as a roadmap for developing the arguments you will use in your own work. (Vinz, 2022)
Tools	Something tangible, such as a template or software program, used in performing an activity to produce a product or result. (Project Management Institute, 2021)
Vision Statement	It is essential that everyone is aware of the project Vision and Objectives. The Vision and Objectives are communicated throughout the Project. This includes referencing the intended outcomes when the project team is engaged in making decisions and solving problems. (Project Management Institute, 2021)
Work Breakdown Structure (WBS)	The WBS is a foundational building block to initiating, planning, executing, and monitoring and controlling processes that are used to manage projects. (Project Management Institute, 2017)
Workforce	The people engaged in or available for work, either in a country or area or in a particular firm or industry. (Oxford Dictionary, n.d.)
Workforce Management	Workforce management (WFM) is the way in which employers strategically allocate people and resources, track attendance and comply with constantly changing workplace laws and regulations. Ultimately, the objectives are to optimize productivity and reduce risk. (ADPM, 2023)
Workforce Productivity	The World Bank Group works in every major area of development. We provide a wide array of financial products and technical assistance, and we help countries share and apply innovative knowledge and solutions to the challenges they face. (Hubstaff, 2023)
World Bank	The World Bank Group works in every major area of development. We provide a wide array of financial products and technical assistance, and we help countries share and apply innovative knowledge and solutions to the challenges they face. (World Bank, n.d.)

Note: Other Project Management Concepts: 2023, Table: Own Work

2.3.1 Current situation of the problem or opportunity in study

In his Sectoral Speech on January 19, 2020, the Minister, The Honourable Nigel Clarke, Jamaica's Minister of Finance and the Public Service, stated that, "the manufacturing sector of the economy has been experiencing the most robust and consistent period of growth of any period in at least 25 years. While Jamaica's fiscal incentive regime

does not prefer one sector over another, the GOJ is firmly of the view that Jamaica has great potential in manufacturing and this sector is strategically important for Jamaica's growth and employment ambitions" (Mininstry of Finance and the Public Service, n.d.).

Whilst GDP from Manufacturing in Jamaica increased to 18,025 USD Million in the third quarter of 2022 from 17,327 USD Million in the second quarter of 2022 (Trading Economics, 2023), Minister Clarke also added that the manufacturing sector constitutes only 8.7 per cent of the economy and, as a result, its average quarterly growth of 2.2 per cent over the last four years has not been sufficient to substantially compensate for the variability in other areas of the economy. As such, the recent consistent positive performance of the manufacturing sector has largely gone unnoticed. This may be because we are still psychologically rooted in the traumatic experience of the gutting of Jamaica's productive capacity over much of the past 25 years, beginning in the mid-1990s.

One of the objectives of ISO 30414:2018 Human Resource Management — Guidelines for Internal and External Human Capital Reporting is "to consider and to make transparent the human capital contribution to the organization in order to support sustainability of the workforce." (ISO, n.d.). Improving Jamaica's productive capacity can be achieved by applying the core Human Capital Reporting (HCR) areas under this standard of: Compliance and Ethics; Costs; Diversity; Leadership; Organizational Culture; Productivity; Recruitment, Mobility and Turnover; Skills and Capabilities; Succession Planning, and Workforce Availability.

2.3.2 Previous research done for the topic in study

ISO standards support global trade, drive inclusive and equitable economic growth, advance innovation and promote health and safety to achieve a sustainable future. ISO provides a neutral platform, where through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market relevant International Standards that support innovation and provide solutions to global challenges.

According to, (International Organization for Standardization, 2021), "the building of consensus across multiple levels establishes trust and credibility in our organization, and the International Standards we produce, that make us a global leader in our field. To realize our vision, we must develop consensus-based standards that are relevant and respond to current and future challenges. We must focus on getting the right standards to market at the right time, with the right content and in the right format".

In accordance with its Jamaica Bureau of Standards (JBS) Certification Mark Programme, the Bureau of Standards Jamaica (BSJ), in the year, 2022, published its "Draft Jamaican Standard Guide for Human Resource Management – Guidelines for Internal and External Human Capital Reporting", titled JS ISO 30414: 2022, for a non-objection period: 14 August 2022 – 12 September 2022 (Bureau of Standards Jamaica, 2022). The JBS provides certification services for manufacturers participating in the programme and licensed to use the gazetted JBS Certification Marks to indicate conformity with Jamaican standards (Bureau of Standards Jamaica, 2022).

After the non-objection period, the BSJ then published the final 'adapted' standards 'FDJS ISO 30414: 2022', in October 2022, as part of its Standards Development Work

Programme in order to meet the requirements specified in Annex 3 Code of Good Practice for the Preparation, Adoption and Application of Standards prepared by the World Trade Organization (WTO) in the Agreement on Technical Barriers to Trade (TBT). According to (Bureau of Standards Jamaica, 2022), "the Work Programme contains a list and status of draft standards which are being developed/adopted/revised; classification of the drafts according to the International Classification for Standards (ICS); international standards considered in the development of the draft standards; and a list of standards published since the last publication of the Work Programme".

Whilst, the BSJ has adopted and published the standards of ISO 30414:2022, there still exists a deficiency in the case of having a wholesome guide that in addition to listing the requirements of achieving ISO 3014:2022, would be able to guide organizations on how to achieve each objective, or apply the required metrics. This research paper proposes to address this issue by developing a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018. It is important to note that ISO 30414:2022 will replace the previously published ISO 30414:2018, and is now at the 'under development' stage, entitled, ISO/AWI 30414.

2.3.3 Other theory related to the topic in study

In accordance with (Business Development Bank of Canada, n.d.), there are several steps to becoming ISO certified: (1) Development of a Management System; (2) Implementation of the System; (3) Verification of the Efficacy of the System; and (4)

Registration of the System. Included in these four (4) steps, are the importance of identifying and documenting the business processes, ensuring that the identified processes and procedures are being followed, and creating effective reporting systems to monitor the objectives of the ISO certification.

It has been observed that though several institutions tout the benefit of achieving ISO in Jamaica, documentation speaks only to what the Certification is and the core areas of focus. However, there are no detailed guide as to how these can be achieved, unless an external Consultant is hired. This Consultant however, would guide the organization through the process of becoming ISO certified, but not develop a project management plan that can guide all the stakeholders, and become a historical data and repository for lessons learned.

3 METHODOLOGICAL FRAMEWORK

(McMeekin, Wu, Germeni, & Briggs, 2020) defines “methodological framework” as “a tool to guide the developer through a sequence of steps to complete a procedure. Methodology is defined as the group of methods used in a specified field, and framework is defined as a structure of rules or ideas”.

3.1 Information sources

Information is processed data. The information source is where you got your information from; this can be a book or a website. Information sources is described by (Ajuwon, et al., 2011) as the various means by which information is recorded for use by an individual or an organization. It is the means by which a person is informed about something or knowledge is availed to someone, a group of people or an organization. Information sources can be in print, non-print and electronic media or format, and include observations, people, speeches, documents, pictures and, organizations.

(Streefkerk, 2023), notes that “there are three sources of information, Primary, Secondary and Tertiary”. Primary sources provide raw information and first-hand evidence. Examples include interview transcripts, statistical data, and works of art. Primary research gives you direct access to the subject of your research.

Secondary sources provide second-hand information and commentary from other researchers. Examples include journal articles, reviews, and academic books. Thus, secondary research describes, interprets, or synthesizes primary sources. Primary sources are more credible as evidence, but good research uses both primary and secondary sources.

A tertiary source, also called a reference work, is a source that gives an overview of information gathered from primary and secondary sources but does not provide original interpretations or analysis. These sources types compile information from a wide variety of sources. They may also list, summarize, and index sources that provide original data or direct evidence (primary sources) and sources that describe or interpret this evidence (secondary sources). Tertiary sources are useful for finding background information on your research topic, like key terms or the names of important scholars. But they are usually not cited directly in academic writing. Examples include: Dictionaries, Encyclopedias, Databases and Bibliographies (Ryan, 2022).

Type of Information Sources and their Definitions

The following Table shows the types of information sources, and provide their definitions

Figure 20: Type of Information Sources and their Definitions (Arcada University of Applied Sciences, n.d.)

Information Source	Definition
Empirical and Theoretical	"In the theoretical part of a text, you explain the concepts you intend to use and relate them to each other. You must explain how you intend to use them to understand the empirical data. The theory and concepts will then also be used in the analysis part of the text and you will return to it in the discussion. We need a theoretical basis for our analysis and for this we need scientific texts. We can never trust an unscientific text and assume that it is truthful. We might at best consider them as opinions. These non-theoretical sources are empirical sources. The word empiric comes from the Greek and means experience. Empiricism is collected data - it can be statistics or, for example, a work of art. Since one cannot interpret and analyze the whole of reality, one makes takes such a section of reality, which becomes one's empirical source". (Arcada University of Applied Sciences, n.d.)
Internet	The Internet is suitable for information retrieval when you are looking for information on current events or phenomena or you quickly need information about an unusual subject. (Arcada University of Applied Sciences, n.d.) The Web allows you to access most types of information on the Internet through a browser. One of the main features of the Web is the ability to quickly link to other related information. The Web contains information beyond plain text, including sounds, images, and video. The important thing to do when using information on the Internet is to know how to evaluate it! (University of Fort Hare, n.d.)
Newspaper	A Newspaper is a collection of articles about current events usually published daily. Since there is at least one in every city, it is a great source for local information. (University of Fort Hare, n.d.)
Library Catalog(ue)	A Library Catalogue is an organized and searchable collection of records of every item in a library and can be found on the library home page. The catalog will point you to the location of a particular source, or group of sources, that the library owns on your topic. (University of Fort Hare, n.d.)
Magazine	A Magazine is a collection of articles and images about diverse topics of popular interest and current events. Usually these articles are written by journalists or scholars and are geared toward the average adult. Magazines may cover very "serious" material, but to find consistent scholarly information, you should use journals. (University of Fort Hare, n.d.)
Database	A Database contains citations of articles in magazines, journals, and newspapers. They may also contain citations to podcasts, blogs, videos, and other media types. Some databases contain abstracts or brief summaries of the articles, while other databases contain complete, full-text articles. Scientific databases contain scholarly journals specialized in different fields of study. If you need a scholarly article for your studies, use the scientific databases provided by the library to find your article. Scholarly journals are recommended especially when you want to access the most recent publications and research results. (University of Fort Hare, n.d.) **Types of databases:** **Full text databases**: contain e.g. scientific articles, research reports, theses, encyclopedias or electronic books. Through full-text databases you can access the publication you want directly **Reference databases:** contain bibliographic data of publications (author, title, publisher, publishing year etc.) and keywords that describe the main contents of the publication. They are often an abstract of each publication is included. In a reference database you won't necessarily get full text access to a certain publication, but based on the reference data found you can use other databases to find the publication from elsewhere. **Fact databases**: contain factual data in the shape of numbers, images, text, etc. Examples of fact databases are statistical databases and different indexes
Journal	A Journal is a collection of articles usually written by scholars in an academic or professional field. (University of Fort Hare, n.d.)
An Editorial Board	An Editorial Board reviews articles to decide whether they should be accepted. Articles in journals can cover very specific topics or narrow fields of research. (University of Fort Hare, n.d.)
Encyclopedia	Encyclopedias are collections of short, factual entries often written by different contributors who are knowledgeable about the topic. There are two types of encyclopedias: general and subject. General encyclopedias provide concise overviews on a wide variety of topics. Subject encyclopedias contain in-depth entries focusing on one field of study. (University of Fort Hare, n.d.)
Books	Books cover virtually any topic, fact or fiction. For research purposes, you will probably be looking for books that synthesize all the information on one topic to support a particular argument or thesis. Libraries organize and store their book collections on shelves called "stacks." (University of Fort Hare, n.d.)
Peer Review	Peer Review means that experts in a subject evaluate the quality of a publication and decide whether it meets the scientific requirements for publication. These experts are expected to assess the content of the article impartially. (Arcada University of Applied Sciences, n.d.)
Scientific articles	Scientific Articles that have undergone peer review are seen as reliable sources, while articles in popular journals and online may be less reliable. In peer review, the experts have checked that the information in the article is correct and that the sources they use are reliable. (Arcada University of Applied Sciences, n.d.)

Note: Type of Information Sources, Adapted from (Arcada University of Applied Sciences, n.d.) Table: Own Work

3.1.1 Primary sources

Primary sources are original materials on which other research studies are based. (Arcada University of Applied Sciences, n.d.), cites examples of these as doctoral theses, research reports, scientific articles or, for example, books. However, all information in a book or an article is not primary, so they might also be secondary sources. “A secondary source can become a primary source depending on your research question. If the person, context, or technique that produced the source is the main focus of your research, it becomes a primary source” (Streefkerk, 2023).

Primary sources report a discovery or share new information; they present first-hand accounts and information relevant to an event. They present information in its original form, not interpreted or condensed or evaluated by other writers. They are usually evidence or accounts of the events, practices, or conditions being researched and created by a person who directly experienced that event. Primary sources are the first formal appearance of results in print or electronic formats. Examples of primary sources are: eyewitness accounts, journalistic reports, financial reports, government documents, archaeological and biological evidence, court records, ephemerals (posters, handbills), literary manuscript and minutes of meetings etc. (Ajuwon, et al., 2011).

3.1.2 Secondary sources

(Ajuwon, et al., 2011) describes a secondary source of information as “one that was created by someone who did not have first-hand experience or did not participate in the events or conditions being researched, which are generally accounts written after the fact with the benefit of hindsight. Further, (Arcada University of Applied Sciences, n.d.) posits

that secondary information sources summarize and structure the information in primary sources, and help you find them (These might be course books, in which researchers refer to their own research or that of other researchers, or encyclopaedias) (Arcada University of Applied Sciences, n.d.).

In order to better understand how to search for and apply secondary sources to our Research, (Ajuwon, et al., 2011) sums it up nicely by stating, " Secondary sources describe, analyze, interpret, evaluate, comment on and discuss the evidence provided by primary sources. Secondary sources are works that are one step removed from the original event or experience that provide criticism, interpretation or evaluation of primary sources. Secondary sources are not evidence, but rather commentary on and discussion of evidence.

Secondary data is one that has been collected by individuals or agencies for purposes other than those of a particular research study".

Information sources

Below is a summary of the Information Sources utilized in this Research.

Figure 21: Summary of Information Sources

Summary of Information Sources		
Objectives	**Primary**	**Secondary**
To develop a **Project management Plan** framed within the standards of the Project Management Institute "to document the processes, practices, inputs, tools and techniques" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Government Document** Bureau of Standards Jamaica. (2021, October). Bureau of Standards Jamaica. (2022).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Integration Management Plan** "to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Regulatory Standards and Regulations** International Organization for Standardization. (2021). **Government Document:** Ministry of Finance and the Public Service. (n.d.). Ministry of Industry, Commerce, Agriculture and Fisheries. (2020, July). Office of the Services Commission. (2021).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Scope Management Plan** "to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Government Document** Office of the Services Commission. (2021).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Schedule Management Plan** "to include the processes required to manage the timely completion" (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Journalistic Reports:** SHRM: Human Capital Report: Industry Manufacturing. (n.d)	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Cost Management Plan** "to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget.	**Government Document:** Manufacturing Task Force. (n.d.). Financial Report: Romero, T. (2022, October 19).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Quality Management Plan** "to include the processes for incorporating the industry's quality policy regarding planning, managing, and controlling project and product quality requirements" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder's expectations.	**Standards and Regulations** SHRM: Human Capital Report: Industry Manufacturing. (n.d.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Resource Management Plan** "to include the processes to identify, acquire and manage the resources needed to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018	**Dictionary:** Oxford Dictionary. (n.d.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Communications Management Plan** to "include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Government Document** Ministry of Industry, Commerce, Agriculture and Fisheries. (2020, July).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Risk Management Plan** "to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Journal Report** The Observatory of Economic Complexity (OEC). (n.d.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Procurement Management Plan** "to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team" (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Government Website:** The Jamaica Manufacturers & Exporters Association (JMEA) . (n.d.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Stakeholder Management Plan** "to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact" (Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.	**Government Website** The Jamaica Manufacturers & Exporters Association (JMEA) . (n.d.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop a Project Management Plan framed within the standards of **Regenerative Development** that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Journal** Gabel, M. (Fall 2015). Universidad Para La Cooperacion Internacional. (2015, May 09).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)

Note: Summary of Information Sources: 2023, Table: Own Work

3.2 Research Methods

Research methodology can be understood as a way to systemically solve or answer the research problem. The selection of the research method is crucial for what conclusions you can make about a phenomenon. It affects what you can say about the cause and factors influencing the phenomenon. Through the methodology, we study the various steps that are generally adopted by a researcher in studying his/her research problem and the underlying logic behind them. (University of Pretoria, n.d.). Research methods refers to the tools that one uses to do research. These can either be qualitative or quantitative or mixed.

3.2.1 Quantitative methods

These examine numerical data and often require the use of statistical tools to analyze data collected. This allows for the measurement of variables and relationships between them can then be established. This type of data can be represented using graphs and tables. Examples of Quantitative research methods include:

- Qualitative Survey
- Secondary Data Collection and Analysis
- Statistical Analysis

3.2.2 Qualitative data

These are non-numerical and focus on establishing patterns. (University of Pretoria, n.d.). Examples of Qualitative research methods include:

- Social Surveys/Questionnaires
- Interviews
- Discussion Groups
- Workshops
- Observation
- Visual Techniques
- Literature Review

3.2.3 Mixed methods

Mixed methods allow for explanation of unexpected results. Mixed methods research defies simple or single definitions, as the following references indicate. Mixed methods are composed of both qualitative and quantitative research methods. A mixed methods approach can apply to all the stages and areas of research: philosophical foundations and paradigms; ontologies, epistemologies, axiologies; methodology, research questions and design; instrumentation, sampling, validity, reliability, data collection; data analysis and interpretation; reporting; and outcomes and uses of the research (Cohen, Manion, & Morrison, 2018).

A mixed-methods research design is a research design that has its philosophical assumptions and methods of inquiry. As a methodology, it includes philosophical assumptions to provide directions for the collection and analysis of data from multiple sources in a single study (Dawadi, Shrestha, & Giri, 2021). Types of Mixed Methods include:

3.2.4 Convergent Parallel Mixed-Methods Design

An efficient and popular approach to mixing methods research is to use a convergent design that follows a theoretical premise. Two different approaches namely qualitative and quantitative methods are mixed to obtain the triangulated results in this design. “At first, two types of data sets are collected concurrently, and secondly, they are analyzed independently using quantitative and qualitative analytical approaches” (Dawadi, Shrestha, & Giri, 2021)

3.2.5 Explanatory Sequential Design

Explanatory Sequential design happens in “two different interactive phases, first collecting and analyzing quantitative data to enhance the qualitative results of the first phase, then creating the second phase based on the quantitative discoveries” (Dawadi, Shrestha, & Giri, 2021).

3.3.6 Exploratory Sequential Design

Exploratory sequential design is a three-phase study in which a researcher works from the constructivist principle. During the first phase, a researcher explores an issue in-depth. "In the second phase, the researcher switches to the post-positivist approach to identify and measure the variable and statistical trend. In this design, qualitative data are initially gathered and examined, and then quantitative data are gathered and evaluated" (Dawadi, Shrestha, & Giri, 2021). Below is the summary of the Research Methods utilized in this Research

Figure 22: Summary of Research Methods (Own Work)

Summary of Research Methods			
Objectives	**Method 1**	**Method 2**	**Method 3**
To develop a **Project Management Plan** framed within the standards of the Project Management Institute "to document the processes, practices, inputs, tools and techniques" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop the **Integration Management Plan** "to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop the **Scope Management Plan** "to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop the **Schedule Management Plan** "to include the processes required to manage the timely completion" (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop the **Cost Management Plan** "to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop the **Quality Management Plan** "to include the processes for incorporating the industry's quality policy regarding planning, managing, and controlling project and product quality requirements" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder's expectations.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop the **Resource Management Plan** "to include the processes to identify, acquire and manage the resources needed to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop the **Communications Management Plan** to "include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop the **Risk Management Plan** "to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop the **Procurement Management Plan** "to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team" (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop the **Stakeholder Management Plan** "to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact" (Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research
To develop a Project Management Plan framed within the standards of **Regenerative Development** that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Quantitative Methods** Secondary Data Collection and Analysis	**Qualitative Method** Workshops Literature Review	**Mixed Methods** Explanatory Sequential Design Combination Research

Note: Summary of Research Methods: 2023, Table: Own Work

3.3 Tools

Data collection tools refer to the devices/instruments used to collect data, such as a paper questionnaire or computer-assisted interviewing system. Case Studies, Checklists, Interviews, Observation sometimes, and Surveys or Questionnaires are all tools used to collect data (Formplus, 2022). Data collection tools include:

- **Interviews -** An interview is a face-to-face conversation between two individuals with the sole purpose of collecting relevant information to satisfy a research purpose. An Audio Recorder or other electronic device can be used to record Interviews, in addition to written notes.
- **Questionnaires** - This is the process of collecting data through an instrument consisting of a series of questions and prompts to receive a response from individuals it is administered to. Questionnaires are designed to collect data from a group.
- **Data Reporting** - Reporting tools enable you to extract and present data in charts, tables, and other visualizations so users can find useful information. Data Reporting includes Newspapers, Website Articles, Journals and Records
- **Existing Data** – These include data from Surveys and Research Journals
- **Observation** - Observation involves the active acquisition of information from a primary source. Observation can also involve the perception and recording of data via the use of scientific instruments.
- **Focus Groups** - This research involves asking open-ended questions to a group of individuals usually ranging from 6-10 people, to provide feedback.

- **Combination Research** - The Combination Research method involves two or more data collection methods

The following Chart shows the Tools that have been utilized in this Research:

Figure 23: Tools (Project Management Institute, 2021)

TOOLS		
Objectives	**Primary Source**	**Secondary Source**
To develop a **Project management Plan** framed within the standards of the Project Management Institute "to document the processes, practices, inputs, tools and techniques" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Website Articles** Bureau of Standards Jamaica. (2022). **Existing Data: Research Journals** Integrated Reporting. (s.f.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Integration Management Plan** "to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Website Articles** Bureau of Standards Jamaica. (2022). **Existing Data: Research Journals** Integrated Reporting. (s.f.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Scope Management Plan** "to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Website Articles** Bureau of Standards Jamaica. (2022). **Existing Data: Research Journals** Integrated Reporting. (s.f.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Schedule Management Plan** "to include the processes required to manage the timely completion" (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Website Articles** Bureau of Standards Jamaica. (2022). **Existing Data: Research Journals** Integrated Reporting. (s.f.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Cost Management Plan** "to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget.	**Existing Data: Research Journals** Europa. (s.f.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Quality Management Plan** "to include the processes for incorporating the industry's quality policy regarding planning, managing, and controlling project and product quality requirements" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder's expectations.	**Website Articles** Bureau of Standards Jamaica. (2022). **Existing Data: Research Journals** Integrated Reporting. (s.f.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Resource Management Plan** "to include the processes to identify, acquire and manage the resources needed to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018	**Website Articles** Bureau of Standards Jamaica. (2022). **Existing Data: Research Journals**	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Communications Management Plan** to "include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Website Articles** Bureau of Standards Jamaica. (2022). **Existing Data: Research Journals** Integrated Reporting. (s.f.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Risk Management Plan** "to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Website Articles** Bureau of Standards Jamaica. (2022). **Existing Data: Research Journals** Integrated Reporting. (s.f.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Procurement Management Plan** "to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team" (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Website Articles** Bureau of Standards Jamaica. (2022). **Existing Data: Research Journals** Integrated Reporting. (s.f.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop the **Stakeholder Management Plan** "to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact" (Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.	**Website Articles** Bureau of Standards Jamaica. (2022). **Existing Data: Research Journals** Integrated Reporting. (s.f.).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)
To develop a Project Management Plan framed within the standards of **Regenerative Development** that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Existing Data: Research Journals** Gabel, M. (Fall 2015).	**Text Book:** (Project Management Institute, 2017) (Project Management Institute, 2021)

Note: Tools used in Project: 2023, Table: Own Work

3.4 Assumptions and constraints

An Assumption is where "any factor in the planning process that is considered to be true, real, or certain, without proof or demonstration, while a Constraint is any limiting factor that affects the execution of a project, program, portfolio, or process" (Project Management Institute, 2017).

The Chart below shows the Assumptions and Constraints considered in this Research.

Figure 24: Assumptions and Constraints (Bureau of Standards Jamaica, 2022)

PROJECT ASSUMPTIONS AND CONSTRAINTS		
OBJECTIVES	**ASSUMPTIONS**	**CONSTRAINTS**
To develop a **Project management Plan** framed within the standards of the Project Management Institute "to document the processes, practices, inputs, tools and techniques" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	The project will be fully supported by all stakeholders	Research cannot begin until the necessary agreements have been signed by Stakeholders
To develop the **Integration Management Plan** "to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	Information about the Manufacturing Industry in Jamaica is organized and available	There may be delay in coordinating activities, based on the learning curve of the stakeholders that will be involved in the implementation.
To develop the **Scope Management Plan** "to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	All phases of the project will be completed on time and within budget	All aspects of the plan may not be delivered due to resistance by stakeholders.
To develop the **Schedule Management Plan** "to include the processes required to manage the timely completion" (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	All phases of the project will be completed on time and within budget	There may be delay in coordinating activities, based on the learning curve of the stakeholders that will be involved in the implementation.
To develop the **Cost Management Plan** "to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget.	All phases of the project will be completed on time and within budget Project will be fully funded by the Sponsor The exchange rate will not increase above JMD$160 to USD$1	Budget of US$155,000.00 would have to be strictly adhered to in order for project objectives to be realized
To develop the **Quality Management Plan** "to include the processes for incorporating the industry's quality policy regarding planning, managing, and controlling project and product quality requirements" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder's expectations.	All required permits and consents will be obtained from the relevant agencies/regulating authority Information on Human Resource Management Systems design is organized and available	Some Human Resource personnel within the Industry may resist this new standardization requirement
To develop the **Resource Management Plan** "to include the processes to identify, acquire and manage the resources needed to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018	Human Resource personnel and Subject Matter Experts (SMEs) will be available from within the Industry Information about the ISO 30414:2018 standard is organized and available	Some Human Resource personnel within the Industry may resist this new standardization requirement
To develop the **Communications Management Plan** to "include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	Human Resource personnel and Subject Matter Experts (SMEs) will be available from within the Industry Information about the ISO 30414:2018 standard is organized and available	Research cannot begin until the necessary agreements have been signed by Stakeholders
To develop the **Risk Management Plan** "to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	The exchange rate will not increase above JMD$160 to USD$1 There will be no natural disasters during the execution of the project	Some Human Resource personnel within the Industry may resist this new standardization requirement
To develop the **Procurement Management Plan** "to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team" (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	All required permits and consents will be obtained from the relevant agencies/regulating authority	Research cannot begin until the necessary agreements have been signed by Stakeholders
To develop the **Stakeholder Management Plan** "to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact" (Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.	Information about the Manufacturing Industry in Jamaica is organized and available The project will be fully supported by all stakeholders	Some key stakeholders may withhold or delay information
To develop a Project Management Plan framed within the standards of **Regenerative Development** that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	The project will be fully supported by all stakeholders The Project will be framed within the standards for Regenerative Development	Some Human Resource personnel within the Industry may resist this new standardization requirement

Note: Assumptions and Constraints: 2023, Table: Own Work

3.5 Deliverables

A Deliverable 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 Institute, 2017). The Deliverables developed in this Research are summarized below:

Figure 25: Deliverables (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020)

PROJECT DELIVERABLES	
OBJECTIVES	**DELIVERABLES**
To develop a **Project management Plan** framed within the standards of the Project Management Institute "to document the processes, practices, inputs, tools and techniques" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Project Management Plan** The Project Management Plan is defined as the Document that describes how the Project will be executed, monitored and controlled.
To develop the **Integration Management Plan** "to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Integration Management Plan** Project Integration Management includes the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups. (Project Management Institute, 2017)
To develop the **Scope Management Plan** "to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Scope Management Plan** Project Scope Management includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. (Project Management Institute, 2017)
To develop the **Schedule Management Plan** "to include the processes required to manage the timely completion" (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Schedule Management Plan** Project Schedule Management includes the processes required to manage the timely completion of the project. (Project Management Institute, 2017)
To develop the **Cost Management Plan** "to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget.	**Cost Management Plan** Project Cost Management includes the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so the project can be completed within the approved budget. (Project Management Institute, 2017)
To develop the **Quality Management Plan** "to include the processes for incorporating the industry's quality policy regarding planning, managing, and controlling project and product quality requirements" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder's expectations.	**Quality Management Plan** Project Quality Management includes the processes for incorporating the organization's quality policy regarding planning, managing, and controlling project and product quality requirements, in order to meet stakeholders' expectations. (Project Management Institute, 2017)
To develop the **Resource Management Plan** "to include the processes to identify, acquire and manage the resources needed to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018	**Resource Management Plan** Project Resource Management includes the processes to identify, acquire, and manage the resources needed for the successful completion of the project. (Project Management Institute, 2017)
To develop the **Communications Management Plan** to "include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Communications Management Plan** Project Communications Management includes the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and ultimate disposition of project information. (Project Management Institute, 2017)
To develop the **Risk Management Plan** "to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Risk Management Plan** Project Risk Management includes the processes of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk on a project. (Project Management Institute, 2017)
To develop the **Procurement Management Plan** "to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team" (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Procurement Management Plan** Project Procurement Management includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team. (Project Management Institute, 2017)
To develop the **Stakeholder Management Plan** "to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact" (Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.	**Stakeholder Management Plan** Project Stakeholder Management includes the processes required to identify the people, groups, or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively. (Project Management Institute, 2017)
To develop a Project Management Plan framed within the standards of **Regenerative Development** that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Regenerative Development Report** The Report on Regenerative development will detail the use of resources to improve society's wellbeing in a way that builds the capacity of the support systems needed for future growth. What sustainable development is to traditional economic development, regenerative development is to sustainable development. (Gabel, Fall 2015)

Note: Deliverables. Information taken from (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020): 2023, Table: Own Work

4 RESULTS

This Chapter includes the results of the research proposal, and seeks to validate the research hypothesis, “Is it possible to build a manual for enabling compliance with ISO 30414:2018: Human Resource Management — Guidelines for Internal and External Human Capital Reporting, for companies within the manufacturing sector in Jamaica”?

4.1. Project Management Plan

Project Management is the application of knowledge, skills, tool and techniques to project activities to meet project requirements. (Project Management Institute, 2017). The project management plan is defined as the “document that describes how the project will be executed, monitored and controlled” (Project Management Institute, 2017). The purpose of this document is to measure the success of the project, in line with its stated project objectives, or the overall organizational strategy.

The project management plan seeks to develop a formal, approved document that will define how the project will be executed, monitored and controlled. The project management plan will include subsidiary management plans, baselines, and other planning documents, related to the management of the project.

The project subsidiary plans will include the Project Integration Management Plan, Project Integration Management Plan, Project Scope Management Plan, Project Schedule Management Plan, Project Cost Management Plan, Project Quality Management Plan, Project Resource Management Plan, Project Communications Plan, Project Risk Management Plan, Project Procurement Management Plan, Project Stakeholder Management Plan, and the Project Regenerative Development Plan. The figure below

shows the interrelation between the Knowledge Areas and Process Groups – highlighting the knowledge requirements and the logical grouping of the project phases.

Figure 26 Project Management Process Group and Knowledge Area Mapping

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

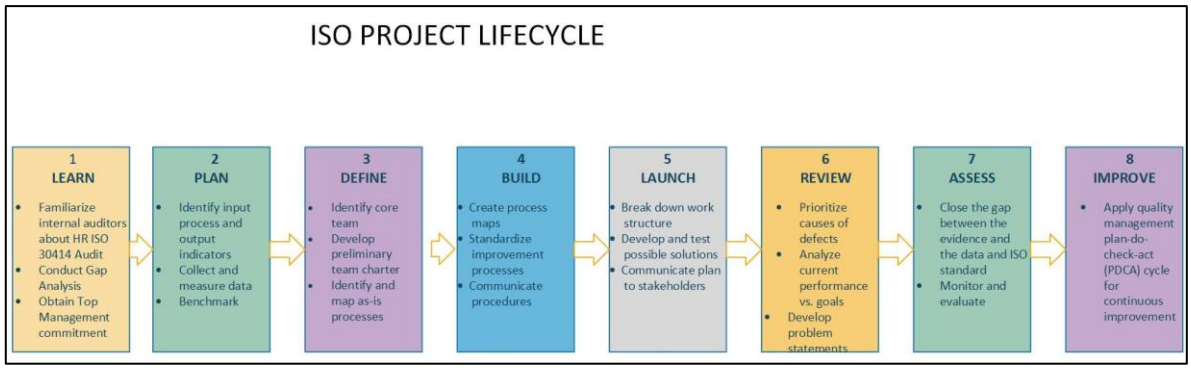
Adapted from A Guide to Project Management Body of Knowledge (PMBOK Guide®) Sixth Edition, 2017

Project and Product Lifecycle

The project will be implemented in a hybrid project lifecycle. The product lifecycle is the life cycle that the product goes through from start to finish, while the project lifecycle is the phases that the project goes through from initiation to closing. The ISO project is what

will bring the ISO product through its lifecycle phases. The product lifecycle is shown below>

Chart 1: Product Lifecycle



Note: ISO Project Lifecycle (Own Source)

4.2. Project Integration Management Plan

Integration includes the characteristics of Unification, Consolidation, Communication and Interrelationship. Integration management detail the Inputs Tools and Techniques used to Develop Project Charter, Develop the Project Management Plan, Direct and Manage Project Work, Manage Project Knowledge, Monitor and Control Project Work, Perform Integrated Change Control, and Close Project. The various output of each process will also be detailed.

The project Manager has responsibility for the project integration management. It is the project manager who will combine the results from all the other knowledge areas and has overall view of the project. The integration knowledge area ensures that the project lifecycle and estimated delivery of the product or result is aligned with the benefits management plan and strategic objectives of the organization.

Develop Project Charter

The first step in Project Integration Management is to develop the Project Charter. The project charter formally authorizes the project. It contains a high-level information for the project including information from the approved Business Case and Agreements concerning the project, including Memorandum of Understanding (MOU) between the Ministry of Industry, Investment and Commerce (MIIC) and the Jamaica Manufacturing Industry (JMEA), Service Level Agreements and Contracts between the ISO Consultant and JMEA.

Information in the project charter includes the project description and justification – including relevant historical information, objectives and success criteria, project and product requirements, risks, constraints and assumptions, high-level scope, budget, schedule and project milestones, the project stakeholders' list, roles and responsibilities of everyone involved in the project, the resource required for completion of the project. The project charter development and the identification of stakeholders are important before the project is planned.

To develop the project charter, expert judgment is used by those who have expertise or specialized knowledge and training. The project manager meets with the project sponsor, and through collaboration, estimates that the budget for the completion of the project is USD$178,250.00, and the timeline for completion is eighteen (18) months. Interviews are conducted with the project's ISO and HR Consultant to obtain their assistance with the schedule estimates. The Project Charter for the ISO project is outlined below.

Chart 2: ISO Project Charter (Own Source)

PROJECT CHARTER		
Date of Approval	**Name of Project**	
September 03, 2023	**ISO 30414:2018 Project** "To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018"	
Type of project:	Predictive, adaptive, hybrid	
Knowledge areas / process groups	**Application area (Sector / Activity)**	
Project Lifecycle: Learn, Plan, Define, Acquire, Build, Launch, Review, Assess, Improve, Handover, Closure **Processes**: Initiate, Plan, Eexcute, Monitor and Control, Close **Knowledge areas**: Integration, Scope, Cost, Schedule, Quality, Resource, Communications, Risk, Procurement, Stakeholder	Manufacturing Industry For-profit organization Functional Organization	
Tentative start date	**Tentative completion date**	**Duration (months)**
August 02, 2023	February 28, 2025	18.26 Months
Project objectives (general and specific)		
General objective Implement ISO 30414:2018 Plan to achieve ISO certification in internal and extenal human capital reporting standards within the Manufacturing Industry in Jamaica **Specific objectives** 1. Obtain commitment from top management and define the scope of the project 2. Select ISO Consultant/ Registrar 3. Evaluate current HR Processes to familiarize internal auditors about HR ISO 30414 Audit 4. Establish the Implementation Team, establishing roles and responsibilities		

5. Develop the Implementation Plan, identify key processes and the operational procedures
6. Select and Train Internal Auditors
7. Conduct HR Process Audit – get and test the data, the evidence and execute the first audit
8. Conduct Gap Analysis – process competency evidence against the HR ISO standard
9. Review by Management
10. Implement ISO 30414:2018 Standard
11. Conduct pre-assessment Audit of the standard
12. Grade current processes and identify and correct areas of non-compliance or non-conformances
13. Conduct second Audit post-gap Coverage – close the gap between the evidence, data and the ISO standard
14. Review by Management
15. Certify the organization in ISO 30414:2018 Certification
16. Approve and record all project-related documents to be used as references and relevant lessons learned for future ISO implementation projects
17. Post-ISO Certfication Support: Monitor, evaluate and assess

Justification or purpose of the project (Contribution and expected results)

- There are no similar Project Management Plans that exist within the manufacturing industry in Jamaica that are designed to allow compliance with ISO 3014:2018
- The Manufacturing Sector represents a critical component of the Jamaican economy. Therefore, the implementation of Human Resource system guidelines will reduce administrative and processing costs, result in increased efficiencies, and improve the value-added knowledge gained from analytics while supporting the organization's (Industry's) principal business needs (Trading Economics, 2023)
- In 2020, Jamaica exported a total of $1.31B, making it the number 147 exporter in the world. During the last five reported years the exports of Jamaica have changed by -$103M from $1.42B in 2015 to $1.31B in 2020. The development of a Human Capital Reporting guideline for the Manufacturing Industry, will aid in better ease of doing business, and hence improvement in export revenues within the sector. (The Observatory of Economic Complexity (OEC), n.d.)

Description of the product or service that the project will generate (Success Criteria) - Final project deliverables

1. At the end of the project, a manual will be developed for enabling compliance with ISO 30414:2018: Human Resource Management — Guidelines for Internal and External Human Capital Reporting, for companies within the manufacturing sector in Jamaica.
2. The development of a human capital reporting system for capturing human resource metrics in accordance with ISO 30414:2018
3. Project implementation Plan which will outline the resources and timeframe for the completion of the project.
4. Project Management Plan in accordance with standards of project management and the Project Management Body of Knowledge (PMBOK)
5. Project Plan developed within the framework of regenerative development standards

Assumptions

1. Information about the manufacturing industry in Jamaica is organized and available.
2. Information about the ISO 30414:2018 standard is organized and available.
3. Information in Human Resource Management Systems design is organized and available.
4. The project will be fully funded by the sponsor.

5. All required permits and consents will be obtained from the relevant agencies/regulating authority.
6. There will be no natural disaster during the execution period of the project.
7. All phases of the project will be completed on time and within budget.
8. The exchange rate will not increase above JMD$160 to US$1.
9. Human Resource Personnel and Subject Matter Expert (SMEs) will be available from within the Industry.
10. The project will be fully supported by all stakeholders.
11. The project will be framed within the standards for Regenerative Development.
12. Actors that we consider to be true for the project and that will have to be confirmed as the project progresses.
13. Project Team will be skilled and knowledgeable

Constraints/Restrictions

1. The project must be completed by February 28, 2025
2. Budget of US$178,250.00 would have to be strictly adhered to in order for project objectives to be realized.
3. Some Human Resource personnel within the Industry may resist this new standardization requirement.
4. Some key stakeholders may withhold or delay information.
5. Research cannot begin until the necessary agreements have been signed by Stakeholders.
6. Existing systems for generating report for initial Audit process may be unable to generate the reports needed for the Audit

Preliminary identification of risks

1. Inadequate budget.
2. Delay in the project execution as a result of inaccessible information or regulatory approval.
3. Change in the market condition.
4. Regulatory project requirement.
5. Unavailability of key stakeholders.
6. Delay in the Project delivery.
7. Lack of clarity in project goals.

General Resources and Budget

Deliverable	Name of Resource	Unit	Amount	Unit Cost USD$	Total Cost USD$
Human Resources					
Project Charter Approval/ Procure Initial Consultancy services of ISO Registrar	**Project Manager**	**1 Project Manager for 18 months**	**50,000**	**2,778 per month**	**50,000**
Select and Train Internal Auditors/ Begin Process Auditing/ ISO Certification	**ISO Consultant**	**1 Consultant training for 30 days**	**30,000**	**1,000 per day**	**30,000**

Provide Employee/User Training	JMEA	1 JMEA Representative 6 Training Sessions	15,000	2,500 per training hour	15,000
Evaluation of current HR processes Select and Train Internal Auditors Develop HR Manual Audit HR system	HR Consultant	1 HR Consultant 160 hours	20,000	125	20,000
Develop Implementation Plan	Project Staff	8 persons	10,000	1,250	10,000
Physical & Technical Resources					
Implement HR Management System Implement System Changes	Data Reporting Software (Licences	1 system	15,000	15,000	15,000
Correct Non-conformances and take corrective actions	Laptops	10 laptops	10,000	1,000	10,000
Internet	Internet	80 Mbps	5,000	62.50	5,000
Cost Estimate					155,000
Contingeny Reserve (10%)					15,500
Management Reserve (5%)					7,750
Project Budget	TOTAL				178,250

Milestones Schedule

Milestone Name	End Date
Project Initiation	August 02, 2023
Project Charter Approval	September 04, 2023
Project Launch Date	September 04, 2023
Procure Initial Consultancy Services	October 02, 2023
Establish Implementation Team	December 01, 2023
Conduct Process Audit	October 02, 2023
Gap Analysis	November 15, 2023
Develop Implementation Plan	January 05, 2024
Define HCR Policy	February 02, 2024
Build HR System Manual	March 13, 2024
Launch HCR System	June 04, 2024
Review HCR System	September 05, 2024
Maintain and Improve HR system	February 19, 2025
Implement System Changes	October 04, 2024
Assessment for Certification	November 20, 2024

ISO HCR Certification	**January 14, 2025**
Surveillance Audit/ Post-Gap coverage	**February 25, 2025**
Project End (Close Out)	**February 28, 2025**

Relevant Historical Information

For developing countries, the manufacturing sector offers the opportunity to re-balance the economy towards higher value-added sectors. “Manufacturing is important to Jamaica as the process of converting raw material into finished product through the application of technology, the employment of capital equipment, and the engagement of labour, delivers substantial economic value-add.

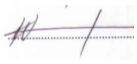
Manufacturing, therefore, has a tremendous capacity to impact and sustain economic and employment growth”. (Ministry of Finance and the Public Service, n.d.) Based upon its contribution to the Jamaican economy, it is important that the manufacturing industry achieve international standards of product and productivity through human capital reporting. This could be achieved by the development of a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

In accordance with its Jamaica Bureau of Standards (JBS) Certification Mark Programme, the Bureau of Standards Jamaica (BSJ), in the year, 2022, published its “Draft Jamaican Standard Guide for Human Resource Management – Guidelines for Internal and External Human Capital Reporting”, titled JS ISO 30414: 2022, for a non-objection period: 14 August 2022 – 12 September 2022 (Bureau of Standards Jamaica, 2022). It has been observed that though several institutions tout the benefit of achieving ISO in Jamaica, documentation speaks only to what the Certification is and the core areas of focus. However, there are no detailed guide as to how these can be achieved.

The BSJ published the final ‘adapted’ standards ‘FDJS ISO 30414: 2022’, in October 2022, as part of its Standards Development Work Programme in order to meet the requirements specified in Annex 3 Code of Good Practice for the Preparation, Adoption and Application of Standards prepared by the World Trade Organization (WTO) in the Agreement on Technical Barriers to Trade (TBT). The JBS provides certification services for manufacturers participating in the programme and licensed to use the gazetted JBS Certification Marks to indicate conformity with Jamaican standards. (Bureau of Standards Jamaica, 2022)

The Work Programme contains a list and status of draft standards which are being developed/adopted/revised; classification of the drafts according to the International Classification for Standards (ICS); international standards considered in the development of the draft standards; and a list of standards published since the last publication of the Work Programme.

Whilst, the BSJ has adopted and published the standards of ISO 30414:2022, there still exists a deficiency in the case of having a wholesome guide that in addition to listing the requirements of achieving ISO 3014:2022, would be able to guide organizations on how to achieve each objective, or apply the required metrics. This research paper proposes to address this issue by developing a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018. It is important to note that ISO 30414:2022 will replace the previously published ISO 30414:2018, and is now at the ‘under development’ stage, entitled, ISO/AWI 30414.

Identification of groups of interest (stakeholders)			
Direct Stakeholders	**Name**	**Position**	**Organization**
Sponsor	Fitz Hanchard	Sponsor	Ministry of Industry, Investment & Commerce (MIIC)
Project Manager	Kerreen Wilson	Project Manager	Pro Management Limited
ISO Consultant/Registrar	Rinstandt Harlet	ISO Consultant/Registrar	ISO Consultants & More
Certification Body	Ernesto Hyman	Certification Body	Maximal ISO
External ISO Auditor	Rickford Honour	External ISO Auditor	Auditors & Consultants LLC
HR Consultant	Margaret Elizer	HR Consultant	Labour & Social Security Alliance
JMEA	Vincent Guthrey	Managing Director/Co-Sponsor	Jamaica Manufacturers & Exporters Association
Bureau of Standards, Jamaica	John Hamilton	President/ ISO Assessor	Bureau of Standards, Jamaica
Project Team	Project Team	Project Team	Pro Management Limited
Indirect Stakeholders	**Name**	**Position**	**Organization**
Employees	Manufacturing Industry Employees	Manufacturing Industry Employees	Manufacturing Industry Employees
Other Industries	Other Jamaican Business Assciations	Other Jamaican Business Assciations	Other Jamaican Business Assciations
Student's name (project manager): **Kerreen Andrea Wilson**	**Signature:** 		
Name and title of the authorizing person (Facilitator):	**Signature:**		

Project Benefits Management Plan

An output of the develop project charter process is the assumption log. The Assumption Log is a log of all the assumptions and constraints of the project. Here is an example below:

Chart 3: Assumptions Log

ASSUMPTIONS LOG						
Project Name	"To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018".		Date	September 03, 2023		
Project Number	ISO:HRM1		Document Number	600		
Project Manager	KERREEN WILSON		Project Owner/Client	Ministry of Industry, Investment and Commerce		
Assumption Number	Date Identified	Assumption	Validation Assigned To	Validation Due Date	Assumption Valid? Y/ N	Status / Comments
1	August 02, 2023	Information about the Manufacturing Industry in Jamaica is organized and available	Project Manager	September 03, 2023	Y	Finalized
2	August 02, 2023	Information about the ISO 20424:2018 standard is organized and available	Project Manager	September 03, 2023	Y	Finalized
3	August 02, 2023	Information on Human Resource Management Systems design is organized and available	Project Manager	September 03, 2023	Y	Finalized
4	August 02, 2023	Project will be fully funded by Sponsor	Project Manager	September 03, 2023	Y	Finalized
5	August 02, 2023	All required Permits and Consents will be obtained from the relevant agencies/regulating authority	Project Manager	September 03, 2023	Y	Finalized
6	August 02, 2023	There will be no natural disasters during the execution of the Project	Project Manager	September 03, 2023	Y	Finalized
7	August 02, 2023	All phases of the project will be completed on time and within budget	Project Manager	September 03, 2023	Y	Finalized
8	August 02, 2023	The Exchange rate will not increase above JMD$160 to US$1	Project Manager	September 03, 2023	Y	Finalized
9	August 02, 2023	Human Resource personnel and Subject Matter Experts (SMEs) will be available from within the Industry	Project Manager	September 03, 2023	Y	Finalized
10	August 02, 2023	The project will be fully supported by Stakeholders	Project Manager	September 03, 2023	Y	Finalized
11	August 02, 2023	The Project will be framed within the standards for regenerative development	Project Manager	September 03, 2023	Y	Finalized

Note: Assumptions Log taken from (Project Management Docs, 2023) Table: Own Work

Develop Project Management Plan

After developing the Project Charter document, the Project Management Plan is developed, one of the inputs of which is the completed and signed project charter. The project management plan is an input to all the other processes, and includes all the project baselines (scope, time and cost), and all the management plans that will manage each of the other nine (9) knowledge areas. The creation of the project management plan details how to

execute, monitor, control and close the project, after which it will need to be baselined (approved by the Sponsor).

Tools and techniques involved in the develop project management plan process will be meetings between the project manager and project team, including the project kick-off meeting. The sponsor and project manager, and any other top management will also meet to discuss data from the evaluation of the HR processes, and any other detail in the benefits management plan. Interpersonal and team skills is an important pre-requisite of the project manager to be able to manage conflicts that may arise.

Other 'Develop Project Management Plan' Documents

There are three (3) other components of the project management plan which are created in the develop project management plan process group. These are the Change Management Plan, The Configuration Management Plan and the Performance Measurement Baseline.

If there are any changes to be made to the project that will affect its baselines, then a change request is done. The Change Management Plan is the document that will outline how the change requests will be collected, assessed, authorized, and incorporated into the project. The configuration management plan outlines the various parts of the project that can be configured, and the performance measurement baseline document integrates scope, schedule and costs into a single baseline that is used to track the performance of the project.

Develop and Manage Project Work

The project manager will lead the project team in building out the actual deliverables and incorporating all approved changes. In this process, the Issues Log and Change Requests Log are constantly being updated throughout the project. These are shown below:

Chart 4: Project Change Request Log

PROJECT CHANGE REQUEST LOG						
Project: ISO 30414:2018 Project						
To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018						
ID	Title	Status	Author	Open Date	Close Date	Comments

Note: Project Change Request Log Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 5: Project Change Request Form

PROJECT CHANGE REQUEST FORM		
Project Name: ISO 30414:2018 Project		
To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018		
Prepared by:		
Date:		
Person(s) requesting change:		
Change number:		
Type of change requested (circle all that apply):		
Terms of Contract:	*Termination of Contract*	*Description of product or service*
Other (Specify):	*Other (Specify):*	
Detailed description of requested change:		
Detailed reason for requested change:		
Effect on project cost:		
Effect on project schedule:		
New project completion date :		
Additional comments:		
Approval:	Project Mgr._____	Date: _____
Approval:	(Other)_____	Date: _____

Note: Lessons Learned Template taken from (Project Management Docs, 2023) Table: Own Work

Issue Log

The issue log is the document that will be used to manage the project issues. It is a document managed by the Project Manager to show the issues on the project and how they progress through to resolution

Chart 6: Issue Log

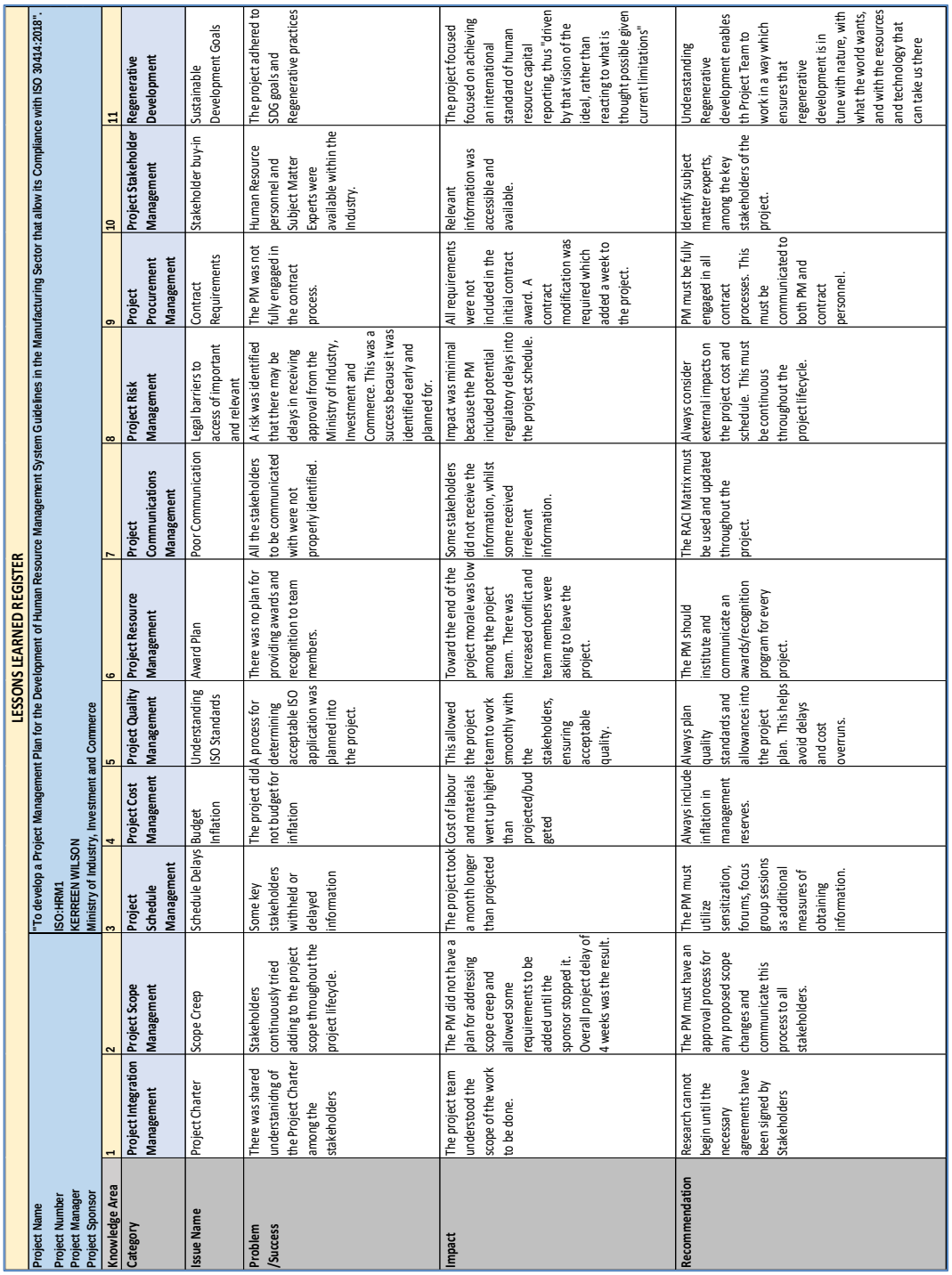
ISO 30414:2018 PROJECT									
ISSUE LOG									
Issue #	Issue Title	Date Identified	Identified by	Details of Issue and Effect (State Issue, effect and Costs)	Issue History/Action Taken (Specific actions and Resolutions)	Agreed Owner	Date for Completion	Severity	Priority	Status
1	System failure					Project Manager		Low	High	New
2	Incomplete data					Project Team		Medium	Medium	WIP
3	Management Review delay					Project Manager		High	Low	On hold
4	Supplier delay					Project Manager		Critical	Critical	Closed

Note: Issue Log Template taken from (Project Management Docs, 2023) Table: Own Work

Manage Project Knowledge

The Manage Project Knowledge process ensures that the knowledge gained before, during and after the project will remain useful for the organization's benefit. The purpose of the lessons learned document is to capture the project's lessons learned in a formal document for use by other project managers on similar future projects. It is updated throughout the project.

Figure 27: Lessons Learned (Own Source)



LESSONS LEARNED REGISTER											
Project Name Project Number Project Manager Project Sponsor	"To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018". ISO:HRM1 KERREEN WILSON Ministry of Industry, Investment and Commerce										
Knowledge Area	1	2	3	4	5	6	7	8	9	10	11
Category	Project Integration Management	Project Scope Management	Project Schedule Management	Project Cost Management	Project Quality Management	Project Resource Management	Project Communications Management	Project Risk Management	Project Procurement Management	Project Stakeholder Management	Regenerative Development
Issue Name	Project Charter	Scope Creep	Schedule Delays	Budget Inflation	Understanding ISO Standards	Award Plan	Poor Communication	Legal barriers to access of important and relevant	Contract Requirements	Stakeholder buy-in	Sustainable Development Goals
Problem /Success	There was shared understanidng of the Project Charter among the stakeholders	Stakeholders continuously tried adding to the project scope throughout the project lifecycle.	Some key stakeholders withheld or delayed information	The project did not budget for inflation	A process for determining acceptable ISO application was planned into the project.	There was no plan for providing awards and recognition to team members.	All the stakeholders to be communicated with were not properly identified.	A risk was identified that there may be delays in receiving approval from the Ministry of Industry, Investment and Commerce. This was a success because it was identified early and planned for.	The PM was not fully engaged in the contract process.	Human Resource personnel and Subject Matter Experts were available within the Industry.	The project adhered to SDG goals and Regenerative practices
Impact	The project team understood the scope of the work to be done.	The PM did not have a plan for addressing scope creep and allowed some requirements to be added until the sponsor stopped it. Overall project delay of 4 weeks was the result.	The project took a month longer than projected	Cost of labour and materials went up higher than projected/budgeted	This allowed the project team to work smoothly with the stakeholders, ensuring acceptable quality.	Toward the end of the project morale was low among the project team. There was increased conflict and team members were asking to leave the project.	Some stakeholders did not receive the information, whilst some received irrelevant information.	Impact was minimal because the PM included potential regulatory delays into the project schedule.	All requirements were not included in the initial contract award. A contract modification was required which added a week to the project.	Relevant information was accessible and available.	The project focused focused on achieving an international standard of human resource capital reporting, thus "driven by that vision of the ideal, rather than reacting to what is thought possible given current limitations"
Recommendation	Research cannot begin until the necessary agreements have been signed by Stakeholders	The PM must have an approval process for any proposed scope changes and communicate this process to all stakeholders.	The PM must utilize sensitization, forums, focus group sessions as additional measures of obtaining information.	Always include inflation in management reserves.	Always plan quality standards and allowances into the project plan. This helps avoid delays and cost overruns.	The PM should institute and communicate an awards/recognition program for every project.	The RACI Matrix must be used and updated throughout the project.	Always consider external impacts on the project cost and schedule. This must be continuous throughout the project lifecycle.	PM must be fully engaged in all contract processes. This must be communicated to both PM and contract personnel.	Identify subject matter experts, among the key stakeholders of the project.	Understanding Regenerative development enables th Project Team to work in a way which ensures that regenerative development is in tune with nature, with what the world wants, and with the resources and technology that can take us there

Note: Lessons Learned Template taken from (Project Management Docs, 2023) Table: Own Work

Monitor and Control Project Work

While the project is being monitored and controlled, corrective and preventive actions or defects repair will have to be taken by the project manager. Once the project manager initiates a change request, the perform integrated change control process is followed in order to approve that change. Below is an example of the Change Request Log which is used in the project.

Figure 28: Project Change Request Log

PROJECT CHANGE REQUEST LOG						
Project: ISO 30414:2018 Project						
To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018						
ID	Title	Status	Author	Open Date	Close Date	Comments

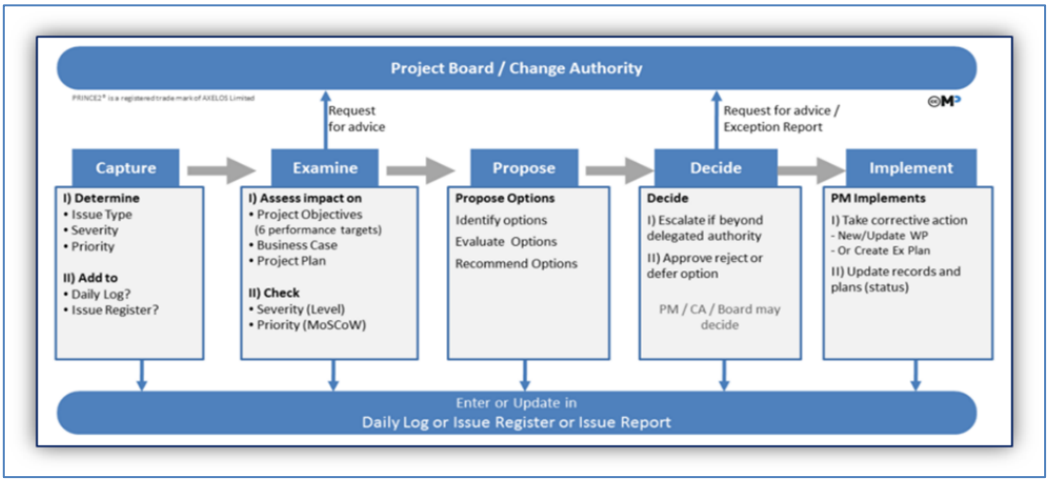
Note: Change Request Template taken from (Project Management Docs, 2023) Table: Own Work

Perform Integrated Change Control

The integrated change control process allows for the review and approval or rejection of change requests. For the changes to take effect, and the project plan be updated, changes must be authorized by the project manager, sponsor or a change control board. The ISO project uses a Change Control Board will be used to review, evaluate, approve or reject changes. The team exercised the use of change requests

to communicate, monitor and control changes within the schedule and various other aspects of the project. The diagram below depicts the change control tool that is used in identification, documentation and communication of the changes required for the project to be implemented and closed out effectively.

Chart 7: Project Board/Change Authority Change Control Tool



Note: Change Authority Template taken from (Project Management Docs, 2023) Table: Own Work

Close Project or Phase

This process is where all the activities are formalized and project documents are updated.

4.3. Project Scope Management Plan

The scope management plan outlines the processes that will be required to ensure that the project includes only the work that is needed, for the successful completion of the project. The purpose of the plan is to accurately define the areas within the scope of the project, document the items necessary to complete the work, and also to further monitor and control the scope, to ensure that all the planned work, and only the planned work is completed. The

key benefit of this process is that it provides guidance and direction on how scope will be managed (controlled and validated) throughout the project. The project scope statement is the description of the project scope, major deliverables, assumptions, and constraints.

Throughout the Project Scope Management process, and in addition to the scope management plan, there are several other processes such as: Collect Requirements, Define Scope, Create WBS, Validate Scope and Control Scope. Scope management will be the responsibility of the Project Manager. The scope is defined by the Project Scope Statement and further outlines the high-level deliverables in a Work Breakdown Structure (WBS), supported by a WBS Dictionary of terms. The Project Manager, sponsor and stakeholders will establish a framework to measure project scope which includes quality checklists and work performance measurements.

Plan Scope Management

The plan scope management process is where the scope and requirement management plans (documents) are created. Information for this process will be obtained by the project manager from meetings with subject matter experts, and from collected data.

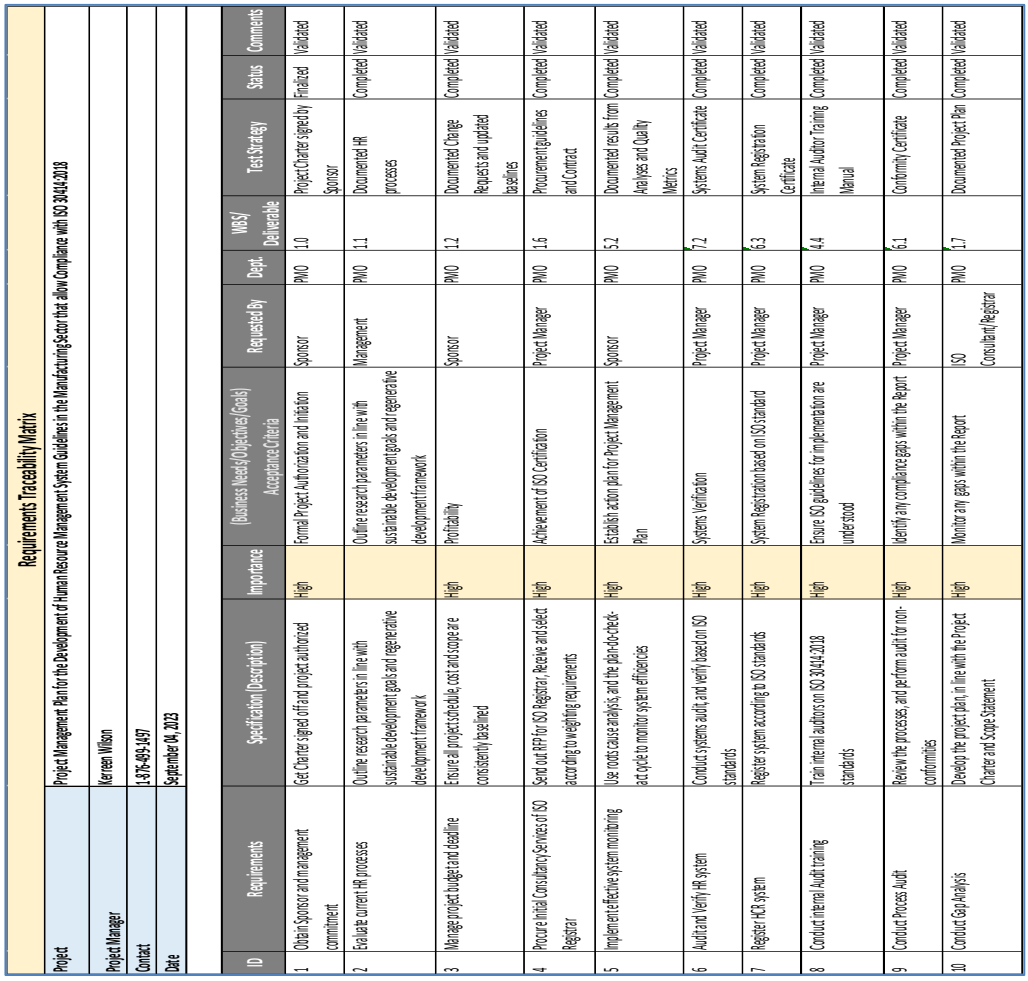
Collect Requirements

The collect requirements process involves defining and documenting the needs that the stakeholders have for the project. This ensures that the final product satisfies the needs of the stakeholders. In addition to contractual agreements and other business documents, the project manager and team will use meetings, workshops and context diagrams to sort and categorize stakeholder needs. In collecting requirements, the project team ensures that all the stakeholders who are affected by and who can affect the project, are properly

documented. They are then ranked according to their needs and also how they will be communicated with throughout the project.

A Requirements Traceability Matrix will show the actual stakeholder requirements, and trace it back to which stakeholder suggested that requirement. The requirements should be measurable, testable and acceptable to the project stakeholders. This matrix helps to keep track of the project including how requirements will be validated.

Figure 29: Requirements Traceability Matrix



Requirements Traceability Matrix											
Project	Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow Compliance with ISO 30414:2018										
Project Manager	Marreen Wilson										
Contact	1-876-469-1497										
Date	September 04, 2023										
ID	Requirements	Specification (Description)	Importance	(Business Needs)/Objectives/(Goals) Acceptance Criteria	Requested By	Dept.	WBS/ Deliverable	Test Strategy	Status	Comments	
1	Obtain Sponsor and management commitment	Get Charter signed off and project authorized	High	Formal Project Authorization and initiation	Sponsor	PMO	1.0	Project Charter signed by Sponsor	Finalized	Validated	
2	Evaluate current HR processes	Outline research parameters in line with sustainable development goals and regenerative development framework		Outline research parameters in line with sustainable development goals and regenerative development framework	Management	PMO	1.1	Documented HR processes	Completed	Validated	
3	Manage project budget and deadline	Ensure all project schedule, cost and scope are consistently baselined	High	Profitability	Sponsor	PMO	1.2	Documented Change Requests and updated baselines	Completed	Validated	
4	Procure initial Consultancy Services of ISO Registrar	Send out RFP for ISO Registrar, Receive and select according to weighting requirements	High	Achievement of ISO Certification	Project Manager	PMO	1.6	Procurement guidelines and Contract	Completed	Validated	
5	Implement effective system monitoring	Use roots cause analysis, and the plan-do-check-act cycle to monitor system efficiencies	High	Establish action plan for Project Management Plan	Sponsor	PMO	5.2	Documented results from Analyses and Quality Metrics	Completed	Validated	
6	Audit and Verify HR system	Conduct systems audit, and verify based on ISO standards	High	Systems Verification	Project Manager	PMO	7.2	Systems Audit Certificate	Completed	Validated	
7	Register HCD system	Register system according to ISO standards	High	System Registration based on ISO standard	Project Manager	PMO	6.3	System Registration Certificate	Completed	Validated	
8	Conduct internal Audit training	Train internal auditors on ISO 30414:2018 standards	High	Ensure ISO guidelines for implementation are understood	Project Manager	PMO	4.4	Internal Auditor Training Manual	Completed	Validated	
9	Conduct Process Audit	Review the processes, and perform audit for non-conformities	High	Identify any compliance gaps within the Report	Project Manager	PMO	6.1	Conformity Certificate	Completed	Validated	
10	Conduct Gap Analysis	Develop the project plan in line with the Project Charter and Scope Statement	High	Monitor any gaps within the Report	ISO Consultant/ Registrar	PMO	1.7	Documented Project Plan	Completed	Validated	

Note: Requirements Traceability Matrix Template taken from (Project Management Docs, 2023) Table: Own Work

Figure 30: Requirements Traceability Matrix Cont'd

Requirements Traceability Matrix										
Project	Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow Compliance with ISO 30414:2018									
Project Manager	Kerreen Wilson									
Contact	1-876-499-1497									
Date	September 04, 2023									
ID	Requirements	Specification (Description)	Importance	(Business Needs/Objectives/Goals) Acceptance Criteria	Requested By	Dept.	WBS/ Deliverable	Test Strategy	Status	Comments
11	Grade Current Process for Conformity/ Non-conformity	Grade for non-conformities according to ISO standards	High	Certificate of Conformity	Project Manager	PMO	1.8	Conformity Certificate	Completed	Validated
12	Conduct Employee and User Training	Train Users and Employees on the system	High	Evidence of user acceptance and training	Project Manager	PMO	5.1	User Training Manual	Completed	Validated
13	Develop Project plan	Develop the project plan, in line with the Project Charter and Scope Statement	High	Develop Project plan in accordance with PMI standards	Project Manager	PMO	2.0	Documented Project Plan	Completed	Validated
14	Plan Implementation	Outline the project and product lifecycle and the steps involved	High	Project plan in accordance with PMI standards	Project Manager	PMO	2.2	Product and Product Lifecycle documented	Completed	Validated
15	Establish Implementation Team	Select the project team that will implement the project, and document their roles	High	Higly trained and skilled workers	Project Manager	PMO	2.1	Project Team Charter	Completed	Validated
16	Identify Key Processes	Identify the key HR processes that will be impacted by the new ISO system	High	Established processes in accordnace with ISO standard	Bureau of Standards Jamaica	PMO	2.3	Documented ISO HR processes	Completed	Validated
17	Communicate with and manage stakeholder needs	Ensure stakeholders are kept informed according to the communication plan	High	Effective communication strategy	Project Team	PMO	2.4	Detailed Communication Plan and strategy	Completed	Validated
18	Update project documents	Keep project documents updated and in a centrally accessible location	High	Efficient document repository	Project Team	PMO	4.1	Updated Documents in Repository	Completed	Validated
19	Review feedback	Hold meeting to determine any gaps within the project plan	High	Effective feedback mechanism	HR Consultant	HR Dept	2.5	Documented Agenda and Minutes of Meeting	Completed	Validated
20	Build HR System Manual	Define the HR policy and objectives, and design systems manual according to ISO standards	High	HR Manual designed according to ISO standards	HR Consultant	HR Dept	4.5	Documented HR Policy	Completed	Validated
21	Refine and Implement System Changes	Correct Non-Conformances & take Corrective Actions	High	HR system in accordence with ISO 30414:2018 standards	External Auditor	PMO	5.1	Certificate of Conformity	Completed	Validated
22	Certify HR system	Perform ISO HR Certification	High	Achievement of ISO Certification	External Certification Body	PMO	8.0	ISO Certificate	Completed	Validated
23	Conduct Surveillance Audits/Post-Gap Coverage	Assess system performance, and identify any gaps for modification and system improvement	High	Achievement of ISO Certification	External Certification Body	PMO	8.1	Documented system performance document	Completed	Validated
24	Hand-over Project (Approval/Delivery)	Present completed Project Management Plan in line with ISO 30414:2018 and Regenerative Development Framework	High	Acceptance by Sponsor of the work to be done	Sponsor	PMO	10.0	Completed Project Plan accepted by Sponsor	Finalized	Validated

Note: Requirements Traceability Matrix Template taken from (Project Management Docs, 2023) Table: Own Work

Define Scope: Project Scope Statement

The define scope process is where the project scope statement is created. In creating the scope statement, all the requirements are analyzed, and the final requirements for the product and project are selected. The project scope statement is one of the most important project documents, and is part of the scope baseline, comprising the work breakdown structure, WBS dictionary. The project charter is used as the guide in developing the scope statement. While the project charter presents a high-level details of the scope, the project scope statement gives a more detailed scope of the project and product, and helps to review change requests.

The scope statement includes the product scope description, the product acceptance criteria, the project deliverables, project exclusions, project constraints, projects assumptions, the project milestones and the stakeholder sign-off (agreement) at the end of the scope statement.

Chart 8: Scope Statement

Project Name:	ISO 30414:2018 Project
Project Number:	ISO HRM1
Project Manager:	Kerreen Wilson

Business Case

ISO 30414, Human Resource Management – Guidelines for internal and external human capital reporting "HCR (human capital reporting) considers different needs of internal and external stakeholders. It is intended to provide all stakeholders an objective way of meaningfully comparing the overall human capital investments and outcomes using a process that can be simplified for smaller enterprises. It allows information relevant to important business-crucial HC issues: compliance, costs, diversity, leadership, occupational health and safety, organizational culture, productivity, recruitment, mobility and turnover, skills and capabilities, succession planning, workforce availability.

For developing countries, the manufacturing sector offers the opportunity to re-balance the economy towards higher value-added sectors. "Manufacturing is important to Jamaica as the process of converting raw material into finished product through the application of technology, the employment of capital equipment, and the engagement of labour, delivers substantial economic value-added. Manufacturing, therefore, has a tremendous capacity to impact and sustain economic and employment growth (Ministry of Finance and the Public Service, n.d.). At its core ISO 30414:2018 utilizes a formal engagement strategy to support the proactive involvement of employees to consistently address the needs of external and internal customers that aligns activities related to leadership training, engagement assessment, communications, learning, innovation and collaboration, rewards and recognition, analytics, and feedback.

Based upon its contribution to the Jamaican economy, it is important that the manufacturing industry achieve international standards of product and productivity through human capital reporting. (Ministry of Industry, Commerce, Agriculture and Fisheries, 2020). This could be achieved by the development of a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

The achievement of the ISO 30414:2018 certification within the manufacturing industry will provide further benefits of:

1. Effective organizational governance and management
2. Maximize productivity and profit
3. Efficient processes and procedures
4. Monitoring of skills and capabilities

Objectives

1. Obtain commitment from top management and define the scope of the project
2. Select ISO Consultant/ Registrar
3. Evaluate current HR Processes to familiarize internal auditors about HR ISO 30414 Audit
4. Establish the Implementation Team, establishing roles and responsibilities
5. Develop the Implementation Plan, identify key processes and the operational procedures
6. Select and Train Internal Auditors
7. Conduct HR Process Audit – get and test the data, the evidence and execute the first audit
8. Conduct Gap Analysis – process competency evidence against the HR ISO standard
9. Review by Management
10. Implement ISO 30414:2018 Standard
11. Conduct pre-assessment Audit of the standard
12. Grade current processes and identify and correct areas of non-compliance or non-conformances
13. Conduct second Audit post-gap Coverage – close the gap between the evidence, data and the ISO standard
14. Review by Management
15. Certify the organization in ISO 30414:2018 Certification
16. Approve and record all project-related documents to be used as references and relevant lessons learned for future ISO implementation projects
17. Post-ISO Certification Support: Monitor, evaluate and assess

Scope Definition

This project involves the development of a project management plan for the Development of a Human Resource Management System Guidelines in the Manufacturing Sector in Jamaica that allow its Compliance with ISO 30414:2018. The project will last for 18.26 months, at a cost of USD$178,250.00 and will involve representatives of the manufacturing sector, the Jamaica Manufacturers and Exporters Association (JMEA), the Ministry of Industry, Investment and Commerce (MIIC) who is the Sponsor of the Project, and the various stakeholders within the manufacturing industry in Jamaica.

The project will also include:

1. Gap Analysis
2. Identification of Key Processes
3. Process Auditing
4. Internal Auditor Training
5. Employee/User Training
6. Certification Assessment

Other features include:

1. Implementation of suitable metrics to measure people strategy
2. All in accordance with ISO standard 30414:2018

Acceptance Criteria

Reportable Metrics on

1. Compliance (demonstrate compliance against legislation)
2. Costs
3. Diversity
4. Leadership
5. Leadership Development
6. Occupational Health and Safety
7. Organizational Culture
8. Recruitment, Mobility and Turnover
9. Employee Bench Strength
10. Skills and Capabilities
11. Workforce Availability

Deliverables

1. Project Management Plan framed within PMI standards and regenerative development framework
2. Human Resource Management System
3. Human Capital Report System
4. Project Implementation Plan Trained Internal Auditors
5. HR System Manual
6. ISO HR Certification

Exclusions

1. Insurance costs are not a part of the project
2. No legal costs have been considered as part of the project
3. Application updates that are planned for a later project and are intentionally not included in this project

Constraints

1. The project must be completed by February 28, 2025
2. Budget of US$178,250.00 would have to be strictly adhered to in order for project objectives to be realized.
3. Some Human Resource personnel within the Industry may resist this new standardization requirement.
4. Some key stakeholders may withhold or delay information.
5. Research cannot begin until the necessary agreements have been signed by Stakeholders.
6. Existing systems for generating report for initial Audit process may be unable to generate the reports needed for the Audit

Assumptions
1. Information about the manufacturing industry in Jamaica is organized and available. 2. Information about the ISO 30414:2018 standard is organized and available. 3. Information in Human Resource Management Systems design is organized and available. 4. The project will be fully funded by the sponsor. 5. All required permits and consents will be obtained from the relevant agencies/regulating authority. 6. There will be no natural disaster during the execution period of the project. 7. All phases of the project will be completed on time and within budget. 8. The exchange rate will not increase above JMD$160 to US$1. 9. Human Resource Personnel and Subject Matter Expert (SMEs) will be available from within the Industry. 10. The project will be fully supported by all stakeholders. 11. The project will be framed within the standards for Regenerative Development. 12. Actors that we consider to be true for the project and that will have to be confirmed as the project progresses.

Milestones Schedule	
Milestone Name	End Date
Project Initiation	**August 02, 2023**
Project Charter Approval	September 04, 2023
Project Launch Date	September 04, 2023
Procure Initial Consultancy Services	October 02, 2023
Establish Implementation Team	December 01, 2023
Conduct Process Audit	October 02, 2023
Gap Analysis	November 15, 2023
Develop Implementation Plan	January 05, 2024
Define HCR Policy	February 09, 2024
Build HR System Manual	March 13, 2024
Launch HCR System	June 04, 2024
Review HCR System	September 05, 2024
Maintain and Improve HR system	February 28, 2025
Implement System Changes	October 14, 2024
Assessment for Certification	November 20, 2024
ISO HCR Certification	January 14, 2025
Surveillance Audit/ Post-Gap coverage	February 25, 2025
Project End (Close Out)	**February 28, 2025**

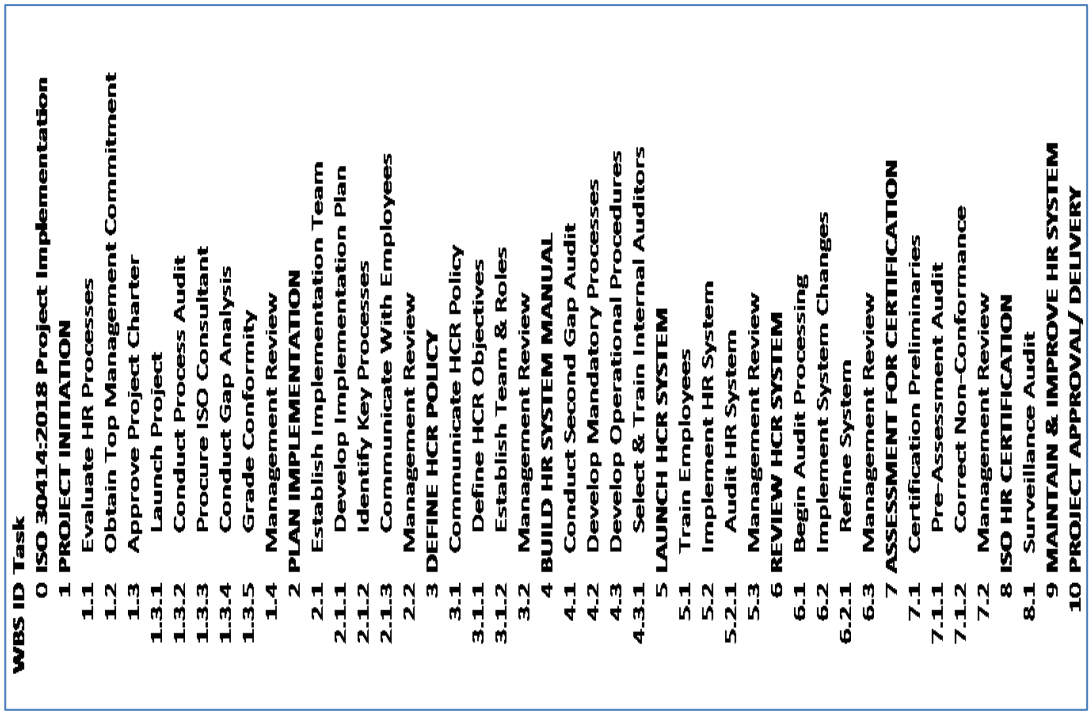
Budget	
Expenditure Type	**Cost in US$**
Project Initiation	50,000.00
Plan Implementation	30,000.00

Define HCR Policy	15,000.00
Build HR System Manual	20,000.00
Launch HCR System	10,000.00
Review HCR System	15,000.00
Assessment and ISO Certification	10,000.00
Surveillance Audit	5,000.00
Contingency Reserve	15,500.00
Management Reserve	7,750.00
Total Budget	**178,250.00**

Create WBS

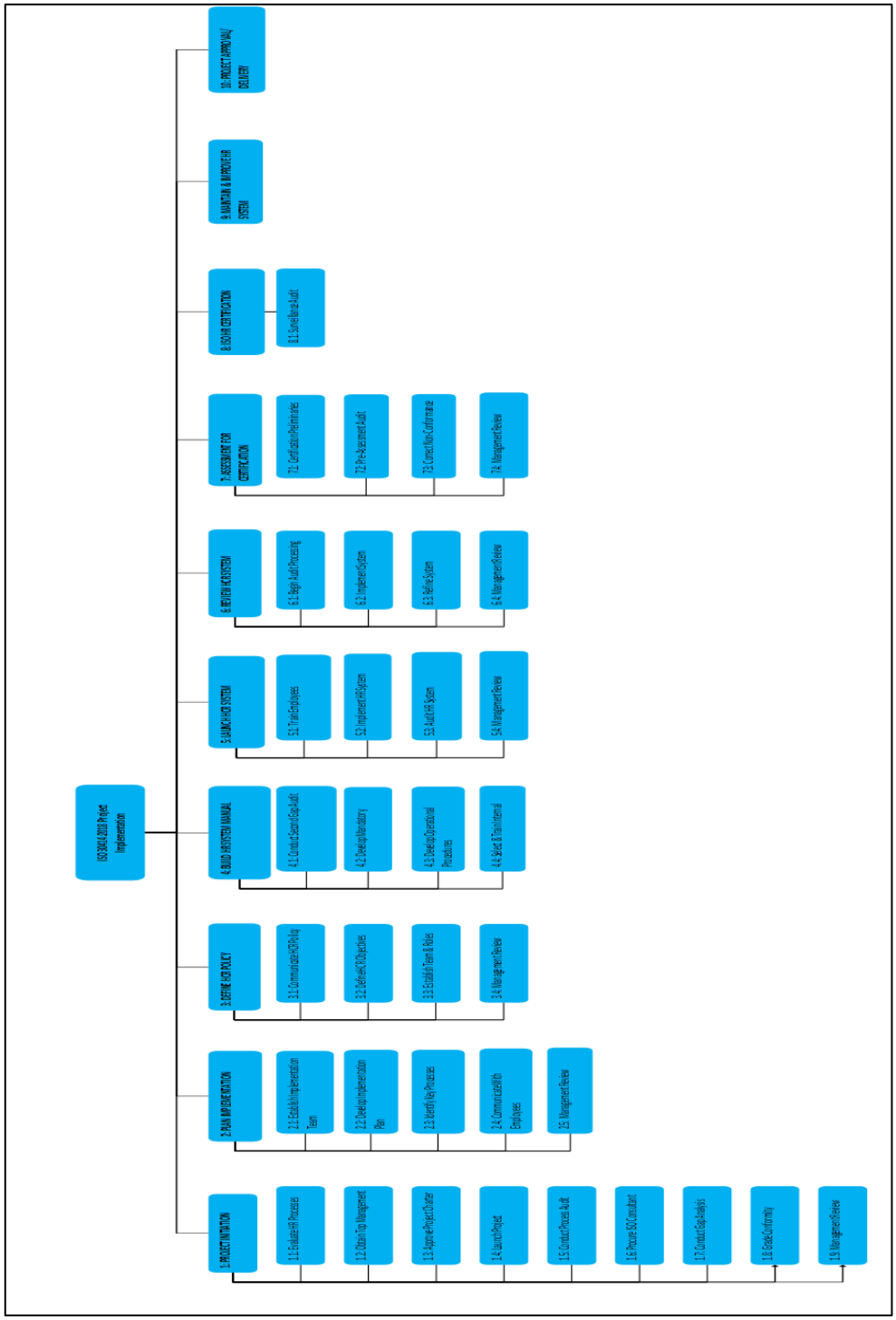
In order to create the WBS, the decomposition technique is used to divide the project deliverables from the scope statement into smaller parts, known as work packages. The WBS is hierarchical, and the top level or control accounts are more general, while the lower level or work packages are more detailed.

Chart 9:WBS



Note: WBS List (Table: Own Work)

Chart 10: WBS for ISO Project



Note: Work Breakdown Structure Template taken from (Project Management Docs, 2023)
Table: Own Work

WBS Dictionary

The WBS dictionary provides more details about the work packages in the WBS. It supports the WBS and provides information on the work to be done, assumptions, constraints, scheduling and cost estimates and acceptance criteria.

Chart 11: WBS Dictionary Work Package 1

WBS Dictionary	
Project Name: **To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018**	**PRO MANAGEMENT LIMITED**
Control Account ID: 1.0	
Work Package Name: PROJECT INITIATION	
Responsible Organization: PRO MANAGEMENT LIMITED/PROJECT TEAM	
Work Package Deliverable Description: Evaluate current HR processes, obtain top management commitment in order to obtain Project Charter Approval and launch project; Conduct initial process audit and procure the ISO Registrar; Perform first Gap Analysis and grade for non-conformities; Hold first Management Review	Other Comments:
Assumptions and Constraints: **Information about the manufacturing industry in Jamaica is organized and available.** **The project must be completed by August 31, 2024** **Budget of US$178,250.00 would have to be strictly adhered to in order for project objectives to be realized.**	These Assumptions and Constraints refer to the Entire project
Quality Metrics: Must align to Regenerative Development Standards	Other Comments:
Resources Assigned: **Human Resource** 1. One (1) Project Manager **Physical & Technical Resources** 1. One (1) Data Reporting Software (Licences	Other Comments:
Schedule Milestones: September 04, 2023 Project Charter Approval September 04, 2023 Project Launch Date October 02, 2023 Procure Initial Consultancy Services of ISO Registrar	Other Comments: The three milestones belong to this work package
Approved by:_____ Date:_____	
REFERENCES Ministry of Finance and the Public Service. (s.f.). Renaissance of Jamaica's Manufacturing Sector. Obtenido de MOFPS: https://www.mof.gov.jm/renaissance-of-jamaicas-manufacturing-sector/ Project Management Institute. (2021). The Standard for Project Management And A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition. Newton Square, Pennsylvania: Project Manageement Institute. The Jamaica Manufacturers & Exporters Association (JMEA) . (s.f.). The Jamaica Manufacturers & Exporters Association (JMEA): Overview. Obtenido de The Jamaica Manufacturers & Exporters Association (JMEA) : https://jmea.org/about-us/ Universidad Para La Cooperacion Internacional. (09 de May de 2015). Regulations for Final Graduation Project. San Jose, Costa Rica.	

Note: WBS Dictionary Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 12: WBS Dictionary - Work Package 2

WBS Dictionary	
Project Name: **To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018**	**PRO MANAGEMENT LIMITED**
Control Account ID: 2.0	
Work Package Name: PLAN IMPLEMENTATION	
Responsible Organization: PRO MANAGEMENT LIMITED/PROJECT TEAM	
Work Package Deliverable Description: Establish Implementation Team; Develop Implementation Plan; Identify Key Processes; Involve and Communicate with Employees; Management Review	Other Comments:
Assumptions and Constraints: **Project Team will be skilled and knowledgeable** **Information about the manufacturing industry in Jamaica is organized and available.** **Some key stakeholders may withhold or delay information**	These Assumptions and Constraints refer to the Entire project
Quality Metrics: Must align to ISO 30414:2028 standards	Other Comments:
Resources Assigned: **Human Resource** 1. One (1) Project Manager HR Consultant **Physical & Technical Resources** 1. One (1) Data Reporting Software (Licences	Other Comments:
Schedule Milestones: December 01, 2023 Establish Implementation Team January 05, 2024 Develop Implementation Plan	Other Comments:
Approved by:_____ Date:_____	
REFERENCES Ministry of Finance and the Public Service. (s.f.). Renaissance of Jamaica's Manufacturing Sector. Obtenido de MOFPS: https://www.mof.gov.jm/renaissance-of-jamaicas-manufacturing-sector/ Project Management Institute. (2021). The Standard for Project Management And A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition. Newton Square, Pennsylvania: Project Manageement Institute. The Jamaica Manufacturers & Exporters Association (JMEA) . (s.f.). The Jamaica Manufacturers & Exporters Association (JMEA): Overview. Obtenido de The Jamaica Manufacturers & Exporters Association (JMEA) : https://jmea.org/about-us/ Universidad Para La Cooperacion Internacional. (09 de May de 2015). Regulations for Final Graduation Project. San Jose, Costa Rica.	

Note: WBS Dictionary Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 13: WBS Dictionary - Work Package 3

WBS Dictionary	
Project Name: **To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018**	**PRO MANAGEMENT LIMITED**
Control Account ID: 3.0	
Work Package Name: DEFINE HR POLICY	
Responsible Organization: PRO MANAGEMENT LIMITED/PROJECT TEAM	
Work Package Deliverable Description: Communicate HR policy, Define HR objectives, Establish Teams and Roles	Other Comments:
Assumptions and Constraints: **Information in Human Resource Management Systems design is organized and available** **Human Resource Personnel and Subject Matter Expert (SMEs) will be available from within the Industry** **Some Human Resource personnel within the Industry may resist this new standardization requirement** **Existing systems for generating report for initial Audit process may be unable to generate the reports needed for the Audit**	These Assumptions and Constraints refer to the Entire project
Quality Metrics: Must align to Regenerative Development Standards	Other Comments:
Resources Assigned: **Human Resource** 1. One (1) Project Manager **Physical & Technical Resources** 1. One (1) Data Reporting Software (Licences	Other Comments:
Schedule Milestones: June 04, 2024 Launch HCR System September 05, 2024 Review HCR System	Other Comments: The three milestones belong to this work package
Approved by:_____ Date:_____	
REFERENCES Integrated Reporting. (s.f.). Creating Value: The Value of Human Capital Reporting. Obtenido de Integrated Reporting: https://www.integratedreporting.org/wp-content/uploads/2017/05/CreatingValueHumanCapitalK1.pdf ISO. (s.f.). Human Resource Management — Guidelines for internal and external human capital reporting. Obtenido de ISO: https://www.iso.org/obp/ui/#iso:std:iso:30414:ed-1:v1:en Project Management Institute. (2021). The Standard for Project Management And A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition. Newton Square, Pennsylvania: Project Manageement Institute. The Jamaica Manufacturers & Exporters Association (JMEA) . (s.f.). The Jamaica Manufacturers & Exporters Association (JMEA): Overview. Obtenido de The Jamaica Manufacturers & Exporters Association (JMEA) : https://jmea.org/about-us/	

Note: WBS Dictionary Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 14: WBS Dictionary - Work Package 4

WBS Dictionary	
Project Name: **To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018**	**PRO MANAGEMENT LIMITED**
Control Account ID: 4.0	
Work Package Name: BUILD HR SYSTEM MANUAL	
Responsible Organization: PRO MANAGEMENT LIMITED/PROJECT TEAM	
Work Package Deliverable Description: Conduct second gap audit; develop Mandatory procedures; Develop Operational procedures; Select and train internal auditors; Management review	Other Comments:
Assumptions and Constraints: **Information in Human Resource Management Systems design is organized and available** **Human Resource Personnel and Subject Matter Expert (SMEs) will be available from within the Industry** **Some Human Resource personnel within the Industry may resist this new standardization requirement** **Existing systems for generating report for initial Audit process may be unable to generate the reports needed for the Audit**	These Assumptions and Constraints refer to the Entire project
Quality Metrics: The development of a human capital reporting system for capturing human resource metrics in accordance with ISO 30414:2018	Other Comments:
Resources Assigned: **Human Resource** 1. One (1) Project Manager **Physical & Technical Resources** 1. One (1) Data Reporting Software (Licences	Other Comments:
Schedule Milestones: March 13, 2024 Build HR System Manual June 04, 2024 Launch HCR System September 05, 2024 Review HCR System	Other Comments:
Approved by: _____ Date: _____	
REFERENCES Integrated Reporting. (s.f.). Creating Value: The Value of Human Capital Reporting. Obtenido de Integrated Reporting: https://www.integratedreporting.org/wp-content/uploads/2017/05/CreatingValueHumanCapitalK1.pdf ISO. (s.f.). Human Resource Management — Guidelines for internal and external human capital reporting. Obtenido de ISO: https://www.iso.org/obp/ui/#iso:std:iso:30414:ed-1:v1:en Project Management Institute. (2021). The Standard for Project Management And A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition. Newton Square, Pennsylvania: Project Manageement Institute. The Jamaica Manufacturers & Exporters Association (JMEA) . (s.f.). The Jamaica Manufacturers & Exporters Association (JMEA): Overview. Obtenido de The Jamaica Manufacturers & Exporters Association (JMEA) : https://jmea.org/about-us/	

Note: WBS Dictionary Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 15: WBS Dictionary - Work Package 5

WBS Dictionary	
Project Name: **To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018**	**PRO MANAGEMENT LIMITED**
Control Account ID: 5.0	
Work Package Name: LAUNCH HCR SYSTEM	
Responsible Organization: PRO MANAGEMENT LIMITED/PROJECT TEAM	
Work Package Deliverable Description: Provide employee/User Training; Implement the HR Management system; Audit HR system; Management review	Other Comments:
Assumptions and Constraints: **Information in Human Resource Management Systems design is organized and available** **Human Resource Personnel and Subject Matter Expert (SMEs) will be available from within the Industry** **Some Human Resource personnel within the Industry may resist this new standardization requirement** **Existing systems for generating report for initial Audit process may be unable to generate the reports needed for the Audit**	These Assumptions and Constraints refer to the Entire project
Quality Metrics: The development of a human capital reporting system for capturing human resource metrics in accordance with ISO 30414:2018	Other Comments:
Resources Assigned: **Human Resource** 1. One (1) Project Manager **Physical & Technical Resources** 1. One (1) Data Reporting Software (Licences	Other Comments:
Schedule Milestones: June 04, 2024, 2024 Launch HCR System September 05, 2024 Review HCR system	Other Comments: The three milestones belong to this work package
Approved by: _____ Date: _____	
REFERENCES Integrated Reporting. (s.f.). Creating Value: The Value of Human Capital Reporting. Obtenido de Integrated Reporting: https://www.integratedreporting.org/wp-content/uploads/2017/05/CreatingValueHumanCapitalK1.pdf ISO. (s.f.). Human Resource Management — Guidelines for internal and external human capital reporting. Obtenido de ISO: https://www.iso.org/obp/ui/#iso:std:iso:30414:ed-1:v1:en Project Management Institute. (2021). The Standard for Project Management And A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition. Newton Square, Pennsylvania: Project Manageement Institute. The Jamaica Manufacturers & Exporters Association (JMEA) . (s.f.). The Jamaica Manufacturers & Exporters Association (JMEA): Overview. Obtenido de The Jamaica Manufacturers & Exporters Association (JMEA) : https://jmea.org/about-us/	

Note: WBS Dictionary Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 16: WBS Dictionary - Work Package 6

WBS Dictionary	
Project Name: **To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018**	**PRO MANAGEMENT LIMITED**
Control Account ID: 6.0	
Work Package Name: REVIEW HCR SYSTEM	
Responsible Organization: PRO MANAGEMENT LIMITED/PROJECT TEAM	
Work Package Deliverable Description: Begin process auditing; Implement system changes; Refine the System; Management review	Other Comments:
Assumptions and Constraints: **There will be no natural disaster during the execution period of the project** **Information about the ISO 30414:2018 standard is organized and available** **Information in Human Resource Management Systems design is organized and available** **Budget of US$178,250.00 would have to be strictly adhered to in order for project objectives to be realized** **Some Human Resource personnel within the Industry may resist this new standardization requirement** **Existing systems for generating report for initial Audit process may be unable to generate the reports needed for the Audit**	These Assumptions and Constraints refer to the Entire project
Quality Metrics: The development of a human capital reporting system for capturing human resource metrics in accordance with ISO 30414:2018	Other Comments:
Resources Assigned: **Human Resource** 1. One (1) Project Manager **Physical & Technical Resources** 1. One (1) Data Reporting Software (Licences	Other Comments:
Schedule Milestones: September 05, 2024 Review HCR System October 14, 2024 Implement System changes	Other Comments:
Approved by:_____ Date:_____	
REFERENCES Integrated Reporting. (s.f.). Creating Value: The Value of Human Capital Reporting. Obtenido de Integrated Reporting: https://www.integratedreporting.org/wp-content/uploads/2017/05/CreatingValueHumanCapitalK1.pdf ISO. (s.f.). Human Resource Management — Guidelines for internal and external human capital reporting. Obtenido de ISO: https://www.iso.org/obp/ui/#iso:std:iso:30414:ed-1:v1:en Project Management Institute. (2021). The Standard for Project Management And A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition. Newton Square, Pennsylvania: Project Manageement Institute. The Jamaica Manufacturers & Exporters Association (JMEA) . (s.f.). The Jamaica Manufacturers & Exporters Association (JMEA): Overview. Obtenido de The Jamaica Manufacturers & Exporters Association (JMEA) : https://jmea.org/about-us/	

Note: WBS Dictionary Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 17: WBS Dictionary - Work Package 7

WBS Dictionary	
Project Name: **To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018**	**PRO MANAGEMENT LIMITED**
Control Account ID: 7.0	
Work Package Name: ASSESSMENT FOR CERTIFICATION	
Responsible Organization: PRO MANAGEMENT LIMITED/PROJECT TEAM	
Work Package Deliverable Description: Certification Body preliminaries; Pre-Assessment Audit; Correct non-conformances; Take corrective actions; Management Review and Assessment	Other Comments:
Assumptions and Constraints: **All phases of the project will be completed on time and within budget** **Information about the ISO 30414:2018 standard is organized and available** **Information in Human Resource Management Systems design is organized and available** **Budget of US$178,250.00 would have to be strictly adhered to in order for project objectives to be realized** **Some Human Resource personnel within the Industry may resist this new standardization requirement** **Existing systems for generating report for initial Audit process may be unable to generate the reports needed for the Audit**	These Assumptions and Constraints refer to the Entire project
Quality Metrics: The development of a human capital reporting system for capturing human resource metrics in accordance with ISO 30414:2018 Project Plan developed within the framework of regenerative development standards	Other Comments:
Resources Assigned: **Human Resource** 1. One (1) Project Manager **Physical & Technical Resources** 1. One (1) Data Reporting Software (Licences	Other Comments:
Schedule Milestones: November 20, 2024 Assessment for Certification	Other Comments:
Approved by:_____ Date:_____	
REFERENCES Integrated Reporting. (s.f.). Creating Value: The Value of Human Capital Reporting. Obtenido de Integrated Reporting: https://www.integratedreporting.org/wp-content/uploads/2017/05/CreatingValueHumanCapitalK1.pdf ISO. (s.f.). Human Resource Management — Guidelines for internal and external human capital reporting. Obtenido de ISO: https://www.iso.org/obp/ui/#iso:std:iso:30414:ed-1:v1:en Project Management Institute. (2021). The Standard for Project Management And A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition. Newton Square, Pennsylvania: Project Manageement Institute. The Jamaica Manufacturers & Exporters Association (JMEA) . (s.f.). The Jamaica Manufacturers & Exporters Association (JMEA): Overview. Obtenido de The Jamaica Manufacturers & Exporters Association (JMEA) : https://jmea.org/about-us/	

Note: WBS Dictionary Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 18: WBS Dictionary - Work Package 8

WBS Dictionary	
Project Name: **To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018**	**PRO MANAGEMENT LIMITED**
Control Account ID: 8.0	
Work Package Name: ISO HR CERTIFICATION	
Responsible Organization: PRO MANAGEMENT LIMITED/PROJECT TEAM	
Work Package Deliverable Description: Surveillance Audits, Post-gap coverage	Other Comments:
Assumptions and Constraints: **All phases of the project will be completed on time and within budget** **Information about the ISO 30414:2018 standard is organized and available** **Information in Human Resource Management Systems design is organized and available** **Budget of US$178,250.00 would have to be strictly adhered to in order for project objectives to be realized** **Some Human Resource personnel within the Industry may resist this new standardization requirement** **Existing systems for generating report for initial Audit process may be unable to generate the reports needed for the Audit**	These Assumptions and Constraints refer to the Entire project
Quality Metrics: Manual enabling compliance with ISO 30414:2018: Human Resource Management — Guidelines for Internal and External Human Capital Reporting, for companies within the manufacturing sector in Jamaica	Other Comments:
Resources Assigned: **Human Resource** 1. One (1) Project Manager **Physical & Technical Resources** 1. One (1) Data Reporting Software (Licences	Other Comments:
Schedule Milestones: January 14, 2025 ISO HR Certification February 25, 2025 Surveillance Audit/ Post-Gap Coverage	Other Comments:
Approved by: Date:	
REFERENCES Integrated Reporting. (s.f.). Creating Value: The Value of Human Capital Reporting. Obtenido de Integrated Reporting: https://www.integratedreporting.org/wp-content/uploads/2017/05/CreatingValueHumanCapitalK1.pdf ISO. (s.f.). Human Resource Management — Guidelines for internal and external human capital reporting. Obtenido de ISO: https://www.iso.org/obp/ui/#iso:std:iso:30414:ed-1:v1:en Project Management Institute. (2021). The Standard for Project Management And A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition. Newton Square, Pennsylvania: Project Manageement Institute. The Jamaica Manufacturers & Exporters Association (JMEA) . (s.f.). The Jamaica Manufacturers & Exporters Association (JMEA): Overview. Obtenido de The Jamaica Manufacturers & Exporters Association (JMEA) : https://jmea.org/about-us/	

Note: WBS Dictionary Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 19: WBS Dictionary - Work Package 9

WBS Dictionary	
Project Name: **To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018**	**PRO MANAGEMENT LIMITED**
Control Account ID: 9.0	
Work Package Name: MAINTAIN AND IMPROVE HR SYSTEM	
Responsible Organization: PRO MANAGEMENT LIMITED/PROJECT TEAM	
Work Package Deliverable Description: Evaluate current HR processes, obtain top management commitment in order to obtain Project Charter Approval and launch project. Conduct initial process audit and procure the ISO Registrar Perform first Gap Analysis and grade for non-conformities Hold first Management Review	Other Comments:
Assumptions and Constraints: **All phases of the project will be completed on time and within budget** **Information about the ISO 30414:2018 standard is organized and available** **Information in Human Resource Management Systems design is organized and available** **Budget of US$178,250.00 would have to be strictly adhered to in order for project objectives to be realized** **Some Human Resource personnel within the Industry may resist this new standardization requirement** **Existing systems for generating report for initial Audit process may be unable to generate the reports needed for the Audit**	These Assumptions and Constraints refer to the Entire project
Quality Metrics: Manual enabling compliance with ISO 30414:2018: Human Resource Management — Guidelines for Internal and External Human Capital Reporting, for companies within the manufacturing sector in Jamaica	Other Comments:
Resources Assigned: **Human Resource** 1. One (1) Project Manager **Physical & Technical Resources** 1. One (1) Data Reporting Software (Licences	Other Comments:
Schedule Milestones: January 14, 2025 ISO HR Certification February 25, 2025 Surveillance Audit/ Post-Gap Coverage February 28, 2025 Project Delivery/ Close out	Other Comments:
Approved by: Date:	
REFERENCES Integrated Reporting. (s.f.). Creating Value: The Value of Human Capital Reporting. Obtenido de Integrated Reporting: https://www.integratedreporting.org/wp-content/uploads/2017/05/CreatingValueHumanCapitalK1.pdf ISO. (s.f.). Human Resource Management — Guidelines for internal and external human capital reporting. Obtenido de ISO: https://www.iso.org/obp/ui/#iso:std:iso:30414:ed-1:v1:en Project Management Institute. (2021). The Standard for Project Management And A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition. Newton Square, Pennsylvania: Project Manageement Institute. The Jamaica Manufacturers & Exporters Association (JMEA) . (s.f.). The Jamaica Manufacturers & Exporters Association (JMEA): Overview. Obtenido de The Jamaica Manufacturers & Exporters Association (JMEA) : https://jmea.org/about-us/	

Note: WBS Dictionary Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 20: WBS Dictionary - Work Package 10

WBS Dictionary	
Project Name: **To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018**	**PRO MANAGEMENT LIMITED**
Control Account ID: 10.0	
Work Package Name: PROJECT APPROVAL/DELIVERY	
Responsible Organization: PRO MANAGEMENT LIMITED/PROJECT TEAM	
Work Package Deliverable Description: Evaluate current HR processes, obtain top management commitment in order to obtain Project Charter Approval and launch project. Conduct initial process audit and procure the ISO Registrar Perform first Gap Analysis and grade for non-conformities Hold first Management Review	Other Comments:
Assumptions and Constraints: **All phases of the project will be completed on time and within budget** **The project must be completed by February 01, 2025** **Budget of US$178,250.00 would have to be strictly adhered to in order for project objectives to be realized** **The project will be framed within the standards for Regenerative Development** **The project will be fully funded by the sponsor**	These Assumptions and Constraints refer to the Entire project
Quality Metrics: Must align to Regenerative Develeopmnt Standards	Other Comments:
Resources Assigned: **Human Resource** 1. One (1) Project Manager **Physical & Technical Resources** 1. One (1) Data Reporting Software (Licences	Other Comments:
Schedule Milestones: September 04, 2023 Project Charter Approval September 04, 2023 Project Launch Date October 02, 2023 Procure Initial Consultancy Services of ISO Registrar	Other Comments:
Approved by:_____ Date:_____	
REFERENCES Integrated Reporting. (s.f.). Creating Value: The Value of Human Capital Reporting. Obtenido de Integrated Reporting: https://www.integratedreporting.org/wp-content/uploads/2017/05/CreatingValueHumanCapitalK1.pdf ISO. (s.f.). Human Resource Management — Guidelines for internal and external human capital reporting. Obtenido de ISO: https://www.iso.org/obp/ui/#iso:std:iso:30414:ed-1:v1:en Project Management Institute. (2021). The Standard for Project Management And A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition. Newton Square, Pennsylvania: Project Manageement Institute. The Jamaica Manufacturers & Exporters Association (JMEA) . (s.f.). The Jamaica Manufacturers & Exporters Association (JMEA): Overview. Obtenido de The Jamaica Manufacturers & Exporters Association (JMEA) : https://jmea.org/about-us/	

Note: WBS Dictionary Template taken from (Project Management Docs, 2023) Table: Own Work

Validate Scope

The validate scope process is where all the project deliverables are formally inspected and accepted by the Sponsor. Control Quality is generally performed before Validate Scope, although the two processes may be performed in parallel. The project will use the process of inspection and decision-making to validate the scope by ensuring that the actual deliverables are verified against planned deliverables.

Control Scope

Variance Analysis will be used to control the scope. The project manager will ensure that there is no variance between the planned work and the actual work. The change request form will be used to request any formal changes to the scope, and the project manager will need to baseline the scope.

4.4. Project Schedule Management Plan

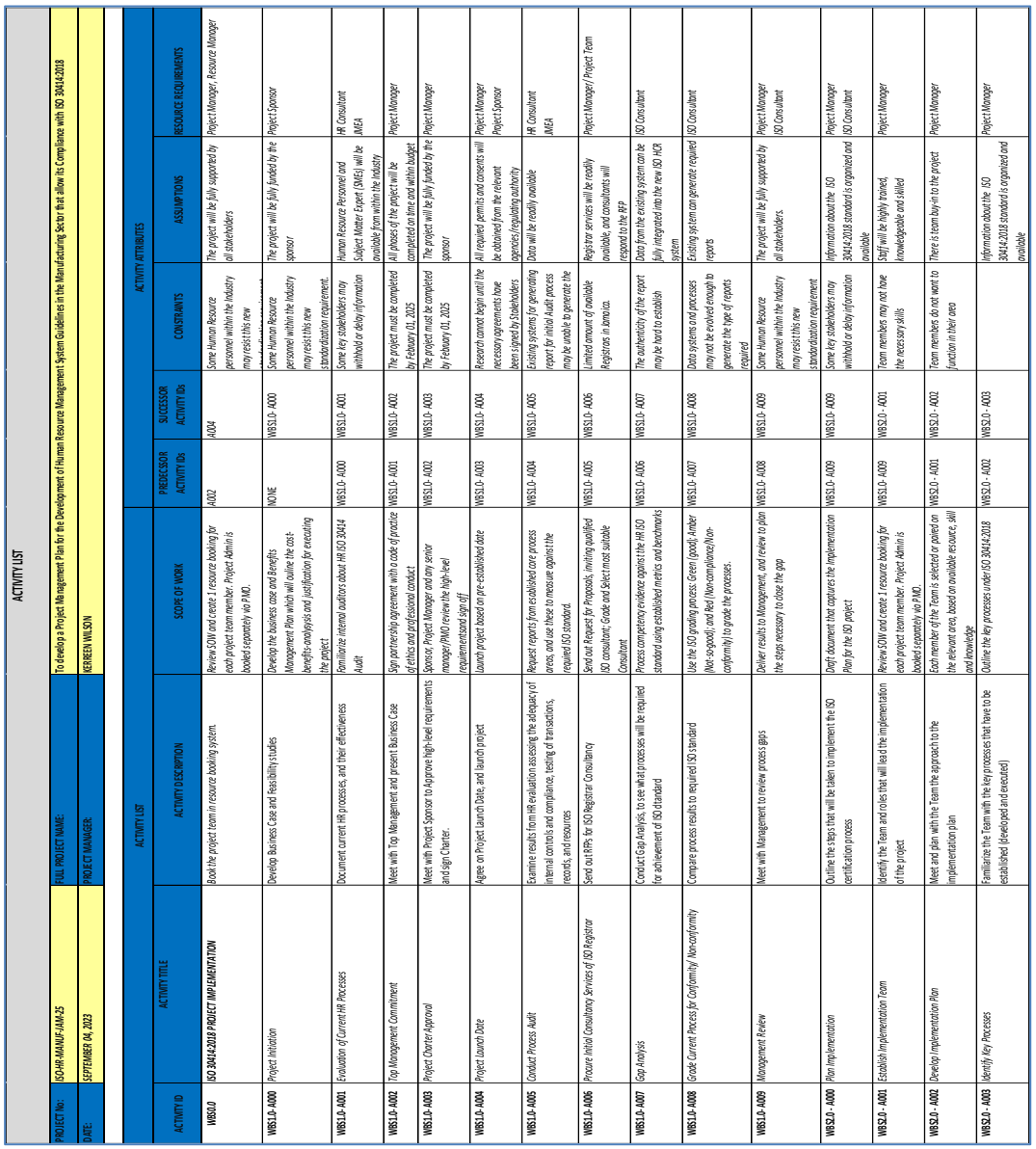
Project Schedule Management documents the project schedule, detailing the timeline for the project completion, from start to finish. The schedule management plan also acts as a communication tool, and keeps the stakeholders abreast of each expected delivery component, and any delays in the project schedule timeframe.

For this project, the Microsoft Projects software was used to develop the schedule using the Program Evaluation Review Technique (PERT) and the Gantt chart – which highlights the activities, the decomposition of the activities, the sequence that these activities will follow, the duration of these activities, and the various resource (personnel) that will be assigned for the execution of the activities.

Define Activities

In this process, the work packages from the WBS are further broken down into activities, which are the specific work that is needed in order for the work deliverables to be accomplished. The project manager along with the subject matter experts meet and estimate the activities and their durations. The activity and milestone lists for the project are detailed below:

Chart 21: Activity List



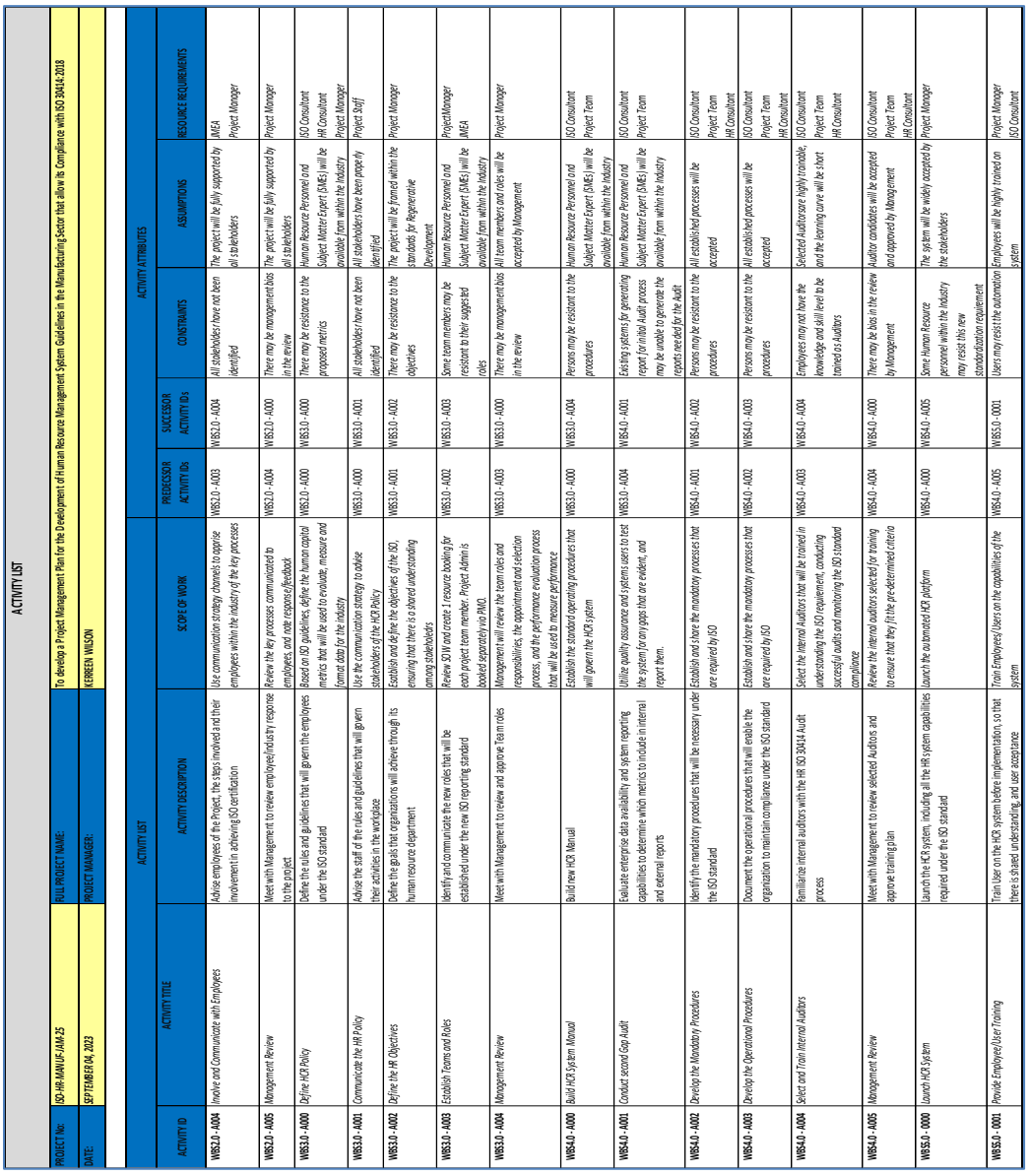
ACTIVITY LIST

PROJECT No.:	ISO-HR-MANUF-JAM-25	FULL PROJECT NAME:	To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018
DATE:	SEPTEMBER 04, 2023	PROJECT MANAGER:	KENREEN WILSON

ACTIVITY LIST				ACTIVITY ATTRIBUTES				
ACTIVITY ID	ACTIVITY TITLE	ACTIVITY DESCRIPTION	SCOPE OF WORK	PREDECESSOR ACTIVITY IDs	SUCCESSOR ACTIVITY IDs	CONSTRAINTS	ASSUMPTIONS	RESOURCE REQUIREMENTS
WBS0.0	**ISO 30414:2018 PROJECT IMPLEMENTATION**	*Book the project team in resource booking system.*	*Review SOW and create 1 resource booking for each project team member. Project Admin is booked separately via PMO.*	*A002*	*A004*	*Some Human Resource personnel within the industry may resist this new*	*The project will be fully supported by all stakeholders*	*Project Manager, Resource Manager*
WBS1.0 - A000	*Project Initiation*	*Develop Business Case and Feasibility studies*	*Develop the business case and Benefits Management Plan which will outline the cost-benefits-analysis and justification for executing the project*	*NONE*	*WBS1.0- A000*	*Some Human Resource personnel within the industry may resist this new standardization requirement.*	*The project will be fully funded by the sponsor*	*Project Sponsor*
WBS1.0- A001	*Evaluation of Current HR Processes*	*Document current HR processes, and their effectiveness*	*Familiarize internal auditors about HR ISO 30414 Audit*	*WBS1.0- A000*	*WBS1.0- A001*	*Some key stakeholders may withhold or delay information*	*Human Resource Personnel and Subject Matter Expert (SMEs) will be available from within the industry*	*HR Consultant SMEA*
WBS1.0- A002	*Top Management Commitment*	*Meet with Top Management and present Business Case*	*Sign partnership agreement with a code of practice of ethics and professional conduct*	*WBS1.0- A001*	*WBS1.0- A002*	*The project must be completed by February 01, 2025*	*All phases of the project will be completed on time and within budget*	*Project Manager*
WBS1.0- A003	*Project Charter Approval*	*Meet with Project Sponsor to Approve high-level requirements and sign Charter.*	*Sponsor, Project Manager and any senior manager/PMO review the high-level requirements and sign off.*	*WBS1.0- A002*	*WBS1.0- A003*	*The project must be completed by February 01, 2025*	*The project will be fully funded by the sponsor*	*Project Manager*
WBS1.0- A004	*Project Launch Date*	*Agree on Project Launch Date, and launch project.*	*Launch project based on pre-established date*	*WBS1.0- A003*	*WBS1.0- A004*	*Research cannot begin until the necessary agreements have been signed by Stakeholders*	*All required permits and consents will be obtained from the relevant agencies/regulating authority*	*Project Manager Project Sponsor*
WBS1.0- A005	*Conduct Process Audit*	*Examine results from HR evaluation assessing the adequacy of internal controls and compliance, testing of transactions, records, and resources*	*Request reports from established core process areas, and use these to measure against the required ISO standard.*	*WBS1.0- A004*	*WBS1.0- A005*	*Existing systems for generating report for initial Audit process may be unable to generate the*	*Data will be readily available*	*HR Consultant SMEA*
WBS1.0- A006	*Procure Initial Consultancy Services of ISO Registrar*	*Send out RFPs for ISO Registrar Consultancy*	*Send out Request for Proposals, inviting qualified ISO consultant, Grade and Select most suitable Consultant*	*WBS1.0- A005*	*WBS1.0- A006*	*Limited amount of available Registrars in Jamaica.*	*Registrar services will be readily available, and consultants will respond to the RFP*	*Project Manager/ Project Team*
WBS1.0- A007	*Gap Analysis*	*Conduct Gap Analysis, to see what processes will be required for achievement of ISO standard*	*Process competency evidence against the HR ISO standard using established metrics and benchmarks*	*WBS1.0- A006*	*WBS1.0- A007*	*The authenticity of the report may be hard to establish*	*Data from the existing system can be fully integrated into the new HCR system*	*ISO Consultant*
WBS1.0- A008	*Grade Current Process for Conformity/ Non-conformity*	*Compare process results to required ISO standard*	*Use the ISO grading process: Green (good), Amber (Not-so-good), and Red (Non-compliance/Non-conformity) to grade the processes.*	*WBS1.0- A007*	*WBS1.0- A008*	*Data systems and processes may not be evolved enough to generate the type of reports required*	*Existing system can generate required reports*	*ISO Consultant*
WBS1.0- A009	*Management Review*	*Meet with Management to review process gaps*	*Deliver results to Management, and review to plan the steps necessary to close the gap*	*WBS1.0- A008*	*WBS1.0- A009*	*Some Human Resource personnel within the industry may resist this new standardization requirement*	*The project will be fully supported by all stakeholders.*	*Project Manager ISO Consultant*
WBS2.0 - A000	*Plan Implementation*	*Outline the steps that will be taken to implement the ISO certification process*	*Draft document that captures the Implementation Plan for the ISO project*	*WBS1.0- A009*	*WBS2.0- A009*	*Some key stakeholders may withhold or delay information*	*Information about the ISO 30414:2018 standard is organized and available*	*Project Manager ISO Consultant*
WBS2.0 - A001	*Establish Implementation Team*	*Identify the Team and roles that will lead the implementation of the project*	*Review SOW and create 1 resource booking for each project team member. Project Admin is booked separately via PMO.*	*WBS1.0- A009*	*WBS2.0 - A001*	*Team members may not have the necessary skills*	*Staff will be highly trained, knowledgeable and skilled*	*Project Manager*
WBS2.0 - A002	*Develop Implementation Plan*	*Meet and plan with the Team the approach to the implementation plan*	*Each member of the Team is selected or pointed on the relevant area, based on available resources, skill and knowledge*	*WBS2.0 - A001*	*WBS2.0 - A002*	*Team members do not want to function in their area*	*There is team buy-in to the project*	*Project Manager*
WBS2.0 - A003	*Identify Key Processes*	*Familiarize the Team with the key processes that have to be established (developed and executed)*	*Outline the key processes under ISO 30414:2018*	*WBS2.0 - A002*	*WBS2.0 - A003*		*Information about the ISO 30414:2018 standard is organized and available*	*Project Manager*

Note: Activity List Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 22: Activity List Cont'd



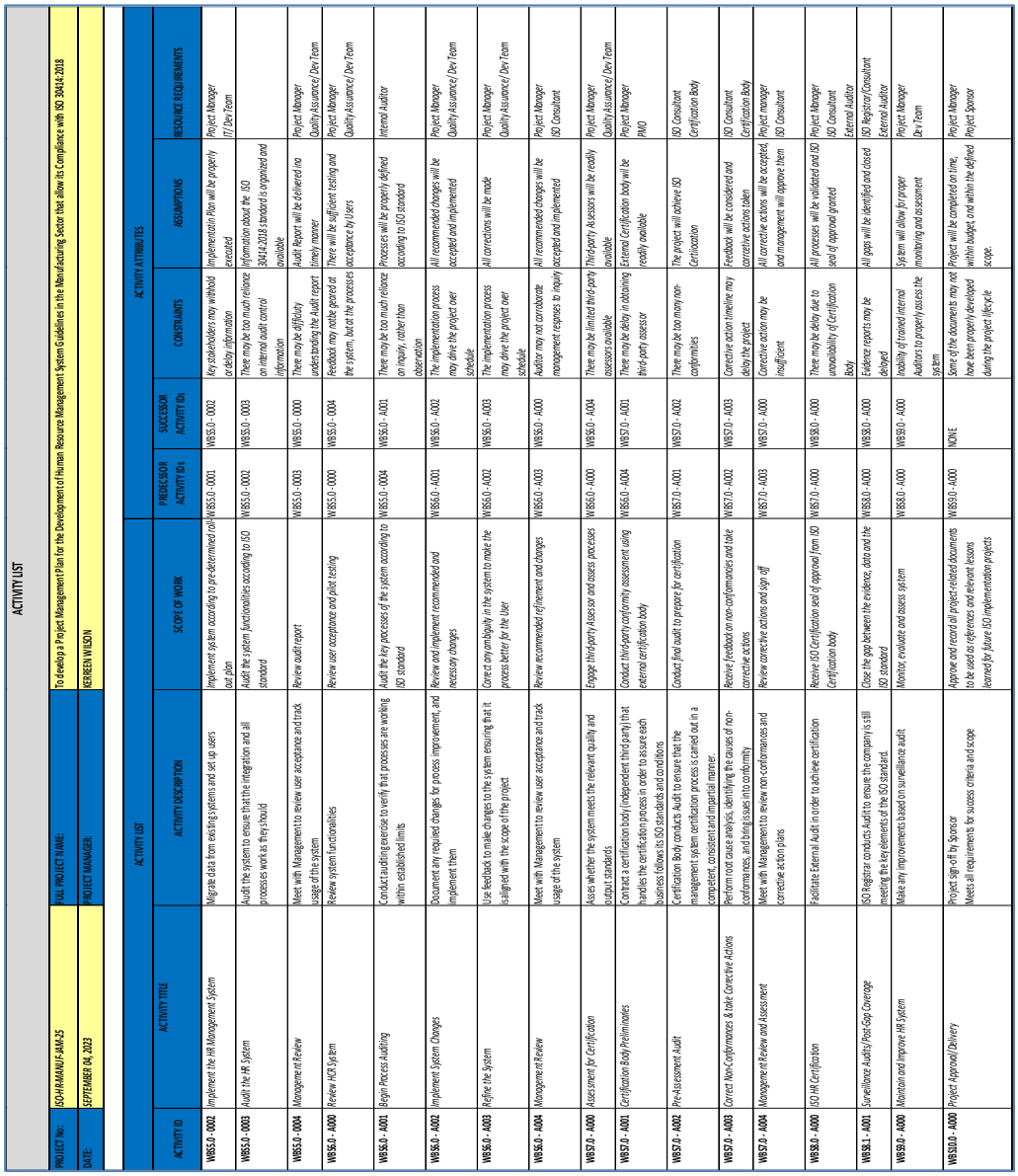
ACTIVITY LIST

PROJECT No:	ISO-HR-MANUF-JAM 25	FULL PROJECT NAME:	To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414: 2018
DATE:	SEPTEMBER 04, 2023	PROJECT MANAGER:	KERREEN WILSON

ACTIVITY LIST				ACTIVITY ATTRIBUTES				
ACTIVITY ID	ACTIVITY TITLE	ACTIVITY DESCRIPTION	SCOPE OF WORK	PREDECESSOR ACTIVITY IDs	SUCCESSOR ACTIVITY IDs	CONSTRAINTS	ASSUMPTIONS	RESOURCE REQUIREMENTS
WBS2.0 - A004	*Involve and Communicate with Employees*	Advise employees of the Project, the steps involved and their involvement in achieving ISO certification	*Use communication strategy channels to apprise employees within the industry of the key processes*	WBS1.0 - A003	WBS3.0 - A004	*All stakeholders have not been identified*	*The project will be fully supported by all stakeholders*	*JMEA* *Project Manager*
WBS2.0 - A005	*Management Review*	Meet with Management to review employee/industry response to the project	*Review the key processes communicated to employees, and note response/feedback*	WBS2.0 - A004	WBS2.0 - A000	*There may be management bias in the review*	*The project will be fully supported by all stakeholders*	*Project Manager*
WBS3.0 - A000	*Define HCR Policy*	Define the rules and guidelines that will govern the employees under the ISO standard	*Based on ISO guidelines, define the human capital metrics that will be used to evaluate, measure and format data for the industry*	WBS2.0 - A000	WBS3.0 - A000	*There may be resistance to the proposed metrics*	*Human Resource Personnel and Subject Matter Expert (SMEs) will be available from within the industry*	*ISO Consultant* *HR Consultant* *Project Manager*
WBS3.0 - A001	*Communicate the HR Policy*	Advise the staff of the rules and guidelines that will govern their activities in the workplace	*Use the communication strategy to advise stakeholders of the HCR Policy*	WBS3.0 - A000	WBS3.0 - A001	*All stakeholders have not been identified*	*All stakeholders have been properly identified*	*Project Staff*
WBS3.0 - A002	*Define the HR Objectives*	Define the goals that organizations will achieve through its human resource department	*Establish and define the objectives of the ISO, ensuring that there is a shared understanding among stakeholders*	WBS3.0 - A001	WBS3.0 - A002	*There may be resistance to the objectives*	*The project will be framed within the standards, for Regenerative Development*	*Project Manager*
WBS3.0 - A003	*Establish Teams and Roles*	Identify and communicate the new roles that will be established under the new ISO reporting standard	*Review SOW and create 1 resource booking for each project team member. Project Admin is booked separately via PMO.*	WBS3.0 - A002	WBS3.0 - A003	*Some team members may be resistant to their suggested roles*	*Human Resource Personnel and Subject Matter Expert (SMEs) will be available from within the industry*	*ProjectManager* *JMEA*
WBS3.0 - A004	*Management Review*	Meet with Management to review and approve Team roles	*Management will review the team roles and responsibilities, the appointment and selection process, and the performance evaluation process that will be used to measure performance*	WBS3.0 - A003	WBS3.0 - A000	*There may be management bias in the review*	*All team members and roles will be accepted by Management*	*Project Manager*
WBS4.0 - A000	*Build HCR System Manual*	Build new HCR Manual	*Establish the standard operating procedures that will govern the HCR system*	WBS3.0 - A000	WBS3.0 - A004	*Persons may be resistant to the procedures*	*Human Resource Personnel and Subject Matter Expert (SMEs) will be available from within the industry*	*ISO Consultant* *Project Team*
WBS4.0 - A001	*Conduct second Gap Audit*	Evaluate enterprise data availability and system reporting capabilities to determine which metrics to include in internal and external reports	*Utilize quality assurance and systems users to test the system for any gaps that are evident, and report them.*	WBS3.0 - A004	WBS4.0 - A001	*Existing systems for generating report for initial Audit process may be unable to generate the reports needed for the Audit*	*Human Resource Personnel and Subject Matter Expert (SMEs) will be available from within the industry*	*ISO Consultant* *Project Team*
WBS4.0 - A002	*Develop the Mandatory Procedures*	Identify the mandatory processes that will be necessary under the ISO standard	*Establish and share the mandatory processes that are required by ISO*	WBS4.0 - A001	WBS4.0 - A002	*Persons may be resistant to the procedures*	*All established processes will be accepted*	*ISO Consultant* *Project Team* *HR Consultant*
WBS4.0 - A003	*Develop the Operational Procedures*	Document the operational procedures that will enable the organization to maintain compliance under the ISO standard	*Establish and share the mandatory processes that are required by ISO*	WBS4.0 - A002	WBS4.0 - A003	*Persons may be resistant to the procedures*	*All established processes will be accepted*	*ISO Consultant* *Project Team* *HR Consultant*
WBS4.0 - A004	*Select and Train Internal Auditors*	Familiarize internal auditors with the HR ISO 30414 Audit process	*Select the Internal Auditors that will be trained in understanding the ISO requirement, conducting successful audits and monitoring the ISO standard compliance*	WBS4.0 - A003	WBS4.0 - A004	*Employees may not have the knowledge and skill level to be trained as Auditors*	*Selected Auditors are highly trainable, and the learning curve will be short*	*ISO Consultant* *Project Team* *HR Consultant*
WBS4.0 - A005	*Management Review*	Meet with Management to review selected Auditors and approve training plan	*Review the internal auditors selected for training to ensure that they fit the pre-determined criteria*	WBS4.0 - A004	WBS4.0 - A000	*There may be bias in the review by Management*	*Auditor candidates will be accepted and approved by Management*	*ISO Consultant* *Project Team* *HR Consultant*
WBS5.0 - 0000	*Launch HCR System*	Launch the HCR system, including all the HR system capabilities required under the ISO standard	*Launch the customized HCR platform*	WBS4.0 - A000	WBS4.0 - A005	*Some Human Resource personnel within the industry may resist this new standardization requirement*	*The System will be widely accepted by the stakeholders*	*Project Manager*
WBS5.0 - 0001	*Provide Employee/User Training*	Train User on the HCR system before implementation, so that there is shared understanding, and user acceptance	*Train Employees/Users on the capabilities of the system*	WBS4.0 - A005	WBS5.0 - 0001	*Users may resist the automation*	*Employees will be highly trained on system*	*Project Manager* *ISO Consultant*

Note: Activity List Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 23: Activity List Cont'd



ACTIVITY LIST			
PROJECT No:	BSHRMANUF-AM-25	FULL PROJECT NAME:	To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414: 2018
DATE:	SEPTEMBER 04, 2023	PROJECT MANAGER:	KENNEN WYSON

ACTIVITY LIST				ACTIVITY ATTRIBUTES				
ACTIVITY ID	ACTIVITY TITLE	ACTIVITY DESCRIPTION	SCOPE OF WORK	PREDECESSOR ACTIVITY IDs	SUCCESSOR ACTIVITY IDs	CONSTRAINTS	ASSUMPTIONS	RESOURCE REQUIREMENTS
WBS5.0 - 0002	*Implement the HR Management System*	Migrate data from existing systems and set up users	*Implement system according to pre-determined roll out plan*	WBS5.0 - 0001	WBS5.0 - 0002	*Key stakeholders may withhold or delay information*	*Implementation Plan will be properly executed*	*Project Manager IT / Dev Team*
WBS5.0 - 0003	*Audit the HR System*	Audit the system to ensure that the integration and all processes work as they should	*Audit the system functionalities according to ISO standard*	WBS5.0 - 0002	WBS5.0 - 0003	*There may be too much reliance on internal audit control information*	*Information about the ISO 30414:2018 standard is organized and available*	
WBS5.0 - 0004	*Management Review*	Meet with Management to review user acceptance and track usage of the system	*Review audit report*	WBS5.0 - 0003	WBS6.0 - 0000	*There may be difficulty understanding the Audit report*	*Audit Report will be delivered ina timely manner*	*Project Manager Quality Assurance/ Dev Team*
WBS6.0 - A000	*Review HCM System*	Review system functionalities	*Review user acceptance and pilot testing*	WBS5.0 - 0000	WBS6.0 - 0004	*Feedback may not be geared at the system, but at the processes*	*There will be sufficient testing and acceptance by Users*	*Project Manager Quality Assurance/ Dev Team*
WBS6.0 - A001	*Begin Process Auditing*	Conduct auditing exercise to verify that processes are working within established limits	*Audit the key processes of the system according to ISO standard*	WBS5.0 - 0004	WBS6.0 - A001	*There may be too much reliance on inquiry, rather than observation*	*Processes will be properly defined according to ISO standard*	*Internal Auditor*
WBS6.0 - A002	*Implement System Changes*	Document any required changes for process improvement, and implement them	*Review and implement recommended and necessary changes*	WBS6.0 - A001	WBS6.0 - A002	*The implementation process may drive the project over schedule*	*All recommended changes will be accepted and implemented*	*Project Manager Quality Assurance/ Dev Team*
WBS6.0 - A003	*Refine the System*	Use feedback to make changes to the system ensuring that it is aligned with the scope of the project	*Correct any ambiguity in the system to make the process better for the User*	WBS6.0 - A002	WBS6.0 - A003	*The implementation process may drive the project over schedule*	*All corrections will be made*	*Project Manager Quality Assurance/ Dev Team*
WBS6.0 - A004	*Management Review*	Meet with Management to review user acceptance and track usage of the system	*Review recommended refinement and changes*	WBS6.0 - A003	WBS6.0 - A000	*Auditor may not corroborate management responses to inquiry*	*All recommended changes will be accepted and implemented*	*Project Manager ISO Consultant*
WBS7.0 - A000	*Assessment for Certification*	Assess whether the system meets the relevant quality and output standards	*Engage third-party Assessor and assess processes*	WBS6.0 - A000	WBS6.0 - A004	*There may be limited third-party assessors available*	*Third-party Assessors will be readily available*	*Project Manager Quality Assurance/ Dev Team*
WBS7.0 - A001	*Certification Body Preliminaries*	Contract a certification body (independent third party) that handles the certification process in order to assure each business follows its ISO standards and conditions	*Conduct third-party conformity assessment using external certification body*	WBS6.0 - A004	WBS7.0 - A001	*There may be delay in obtaining third-party assessor*	*External Certification body will be readily available*	*Project Manager PMO*
WBS7.0 - A002	*Pre-Assessment Audit*	Certification Body conducts Audit to ensure that the management system certification process is carried out in a competent, consistent and impartial manner.	*Conduct final audit to prepare for certification*	WBS7.0 - A001	WBS7.0 - A002	*There may be too many non-conformities*	*The project will achieve ISO Certification*	*ISO Consultant Certification Body*
WBS7.0 - A003	*Correct Non-Conformances & take Corrective Actions*	Perform root cause analysis, identifying the causes of non-conformances, and bring issues into conformity	*Receive feedback on non-conformances and take corrective actions*	WBS7.0 - A002	WBS7.0 - A003	*Corrective action timeline may delay the project*	*Feedback will be considered and corrective actions taken*	*ISO Consultant Certification Body*
WBS7.0 - A004	*Management Review and Assessment*	Meet with Management to review non-conformances and corrective action plans	*Review corrective actions and sign off*	WBS7.0 - A003	WBS7.0 - A000	*Corrective action may be insufficient*	*All corrective actions will be accepted, and management will approve them*	*Project manager ISO Consultant*
WBS8.0 - A000	*ISO HR Certification*	Facilitate External Audit in order to achieve certification	*Receive ISO Certification seal of approval from ISO Certification body*	WBS7.0 - A000	WBS8.0 - A000	*There may be delay due to unavailability of Certification Body*	*All processes will be validated and ISO seal of approval granted*	*Project Manager ISO Consultant External Auditor*
WBS8.1 - A001	*Surveillance Audits/ Post-Gap Coverage*	ISO Registrar conducts Audit to ensure the company is still meeting the key elements of the ISO standard.	*Close the gap between the evidence, data and the ISO standard*	WBS8.0 - A000	WBS8.0 - A000	*Evidence reports may be delayed*	*All gaps will be identified and closed*	*ISO Registrar/Consultant External Auditor*
WBS9.0 - A000	*Maintain and Improve HR System*	Make any improvements based on surveillance audit	*Monitor, evaluate and assess system*	WBS8.0 - A000	WBS9.0 - A000	*Inability of trained internal Auditors to properly assess the system*	*System will allow for proper monitoring and assessment*	*Project Manager Dev Team*
WBS10.0 - A000	*Project Approval/ Delivery*	Project sign-off by Sponsor Meets all requirements for success criteria and scope	*Approve and record all project-related documents to be used as references, and relevant lessons learned for future ISO implementation projects*	WBS9.0 - A000	NONE	*Some of the documents may not have been properly developed during the project lifecycle*	*Project will be completed on time, within budget, and within the defined scope.*	*Project Manager Project Sponsor*

Note: Activity List Template taken from (Project Management Docs, 2023) Table: Own Work

Chart 24: Milestone List

Milestones Schedule	
Milestone Name	**End Date**
Project Initiation	**August 02, 2023**
Project Charter Approval	**September 04, 2023**
Project Launch Date	**September 04, 2023**
Procure Initial Consultancy Services	**October 02, 2023**
Establish Implementation Team	**December 01, 2023**
Conduct Process Audit	**October 02, 2023**
Gap Analysis	**November 15, 2023**
Develop Implementation Plan	**January 05, 2024**
Define HCR Policy	**February 09, 2024**
Build HR System Manual	**March 13, 2024**
Launch HCR System	**June 04, 2024**
Review HCR System	**September 05, 2024**
Maintain and Improve HR system	**February 28, 2025**
Implement System Changes	**October 14, 2024**
Assessment for Certification	**November 20, 2024**
ISO HCR Certification	**January 14, 2025**
Surveillance Audit/ Post-Gap coverage	**February 25, 2025**
Project End (Close Out)	**February 28, 2025**

Note: Milestone List (Own Work)

Sequence Activities

After defining the activities within the activity list, the activities are further sequenced, showing the order in which each activity will appear. The Microsoft projects software utilized the Precedence Diagramming Method to display this sequence. The network diagram can be seen in Appendix 5. The purpose of the Precedence Diagram Method is to produce a more accurate scheduling network diagram.

Estimate Activity Durations

The estimate activity duration is done after sequencing the activities. In estimating the duration, the project manager has to consider the many things which have the potential

to impact the schedule such as risk, resources and their availability, and the scope of work required. Along with expert judgment, the Program Evaluation and Review Technique (PERT) and Critical Path Method (CPM) techniques are used in estimating resources for this project.

The PERT or three-point estimating technique uses three different values (Optimistic, Most Likely and Pessimistic) to calculate the duration or cost of each activity.

Chart 25: PERT Activity Estimate

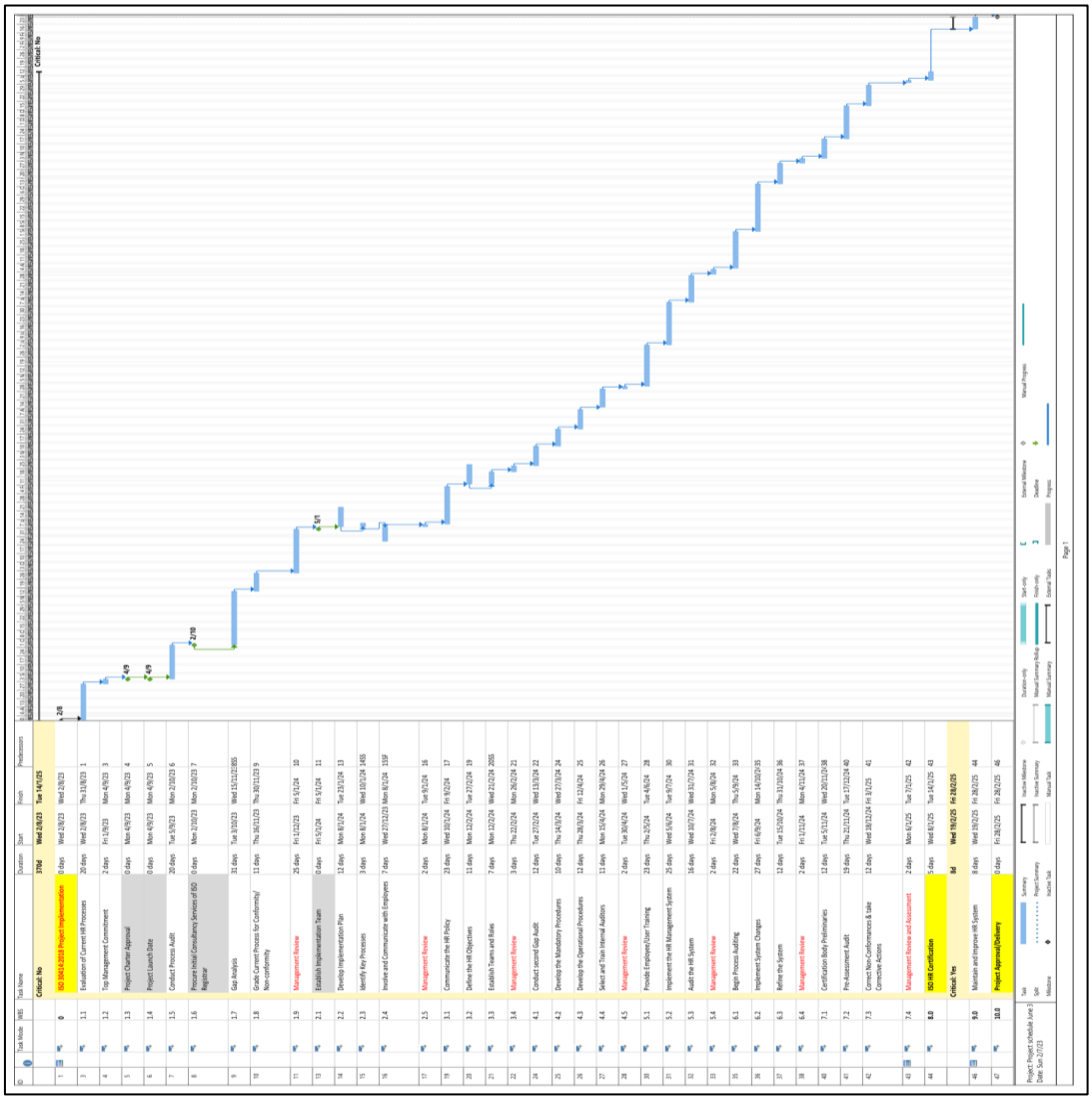
DESCRIPTION	PREDECESSOR	OPTIMISTIC DURATION [tO]	MOST LIKELY DURATION [tM]	PESSIMISTIC DURATION [tP]	EXPECTED DURATION [tE]	VARIANCE	STANDARD DEVIATION
ISO 30414:2018 Project Implementation		403	407.03	423.15	409.05	11.28	3.36
Project Initiation	1SS	0	0	0	0.00	0.00	0.00
Evaluation of Current HR Processes	1	20	20.2	21	20.30	0.03	0.17
Top Management Commitment	3	2	2.02	2.1	2.03	0.00	0.02
Project Charter Approval	4	0	0	0	0.00	0.00	0.00
Project Launch Date	5	0	0	0	0.00	0.00	0.00
Conduct Process Audit	6	20	20.2	21	20.30	0.03	0.17
Procure Initial Consultancy Services of ISO Registrar	7	0	0	0	0.00	0.00	0.00
Gap Analysis	8SS	31	31.31	32.55	31.47	0.07	0.26
Grade Current Process for Conformity/ Non-conformity	9	11	11.11	11.55	11.17	0.01	0.09
Management Review	10	25	25.25	26.25	25.38	0.04	0.21
Plan Implementation	11	0	0	0	0.00	0.00	0.00
Establish Implementation Team	11	0	0	0	0.00	0.00	0.00
Develop Implementation Plan	13	12	12.12	12.6	12.18	0.01	0.10
Identify Key Processes	14SS	3	3.03	3.15	3.05	0.00	0.03
Involve and Communicate with Employees	15SF	7	7.07	7.35	7.11	0.00	0.06
Management Review	16	2	2.02	2.1	2.03	0.00	0.02
Define HCR Policy	12	23	23.23	24.15	23.35	0.04	0.19
Communicate the HR Policy	17	23	23.23	24.15	23.35	0.04	0.19
Define the HR Objectives	19	11	11.11	11.55	11.17	0.01	0.09
Establish Teams and Roles	20SS	7	7.07	7.35	7.11	0.00	0.06
Management Review	21	3	3.03	3.15	3.05	0.00	0.03
Build HR System Manual	18	12	12.12	12.6	12.18	0.01	0.10
Conduct second Gap Audit	22	12	12.12	12.6	12.18	0.01	0.10
Develop the Mandatory Procedures	24	10	10.1	10.5	10.15	0.01	0.08
Develop the Operational Procedures	25	12	12.12	12.6	12.18	0.01	0.10
Select and Train Internal Auditors	26	11	11.11	11.55	11.17	0.01	0.09
Management Review	27	2	2.02	2.1	2.03	0.00	0.02
Launch HCR System	23	23	23.23	24.15	23.35	0.04	0.19
Provide Employee/User Training	28	23	23.23	24.15	23.35	0.04	0.19
Implement the HR Management System	30	25	25.25	26.25	25.38	0.04	0.21
Audit the HR System	31	16	16.16	16.8	16.24	0.02	0.13
Management Review	32	2	2.02	2.1	2.03	0.00	0.02
Review HCR System	29	22	22.22	23.1	22.33	0.03	0.18
Begin Process Auditing	33	22	22.22	23.1	22.33	0.03	0.18
Implement System Changes	35	27	27.27	28.35	27.41	0.05	0.23
Refine the System	36	12	12.12	12.6	12.18	0.01	0.10
Management Review	37	2	2.02	2.1	2.03	0.00	0.02
Assessment for Certification	34	12	12.12	12.6	12.18	0.01	0.10
Certification Body Preliminaries	38	12	12.12	12.6	12.18	0.01	0.10
Pre-Assessment Audit	40	19	19.19	19.95	19.29	0.03	0.16
Correct Non-Conformances & take Corrective Actions	41	12	12.12	12.6	12.18	0.01	0.10
Management Review and Assessment	42	2	2.02	2.1	2.03	0.00	0.02
ISO HR Certification	43	5	5.05	5.25	5.08	0.00	0.04
Surveillance Audits/Post-Gap Coverage	44	8	8.08	8.4	8.12	0.00	0.07
Maintain and Improve HR System	44	8	8.08	8.4	8.12	0.00	0.07
Project Approval/Delivery	46	0	0	0	0.00	0	0

Note: PERT Activity Estimate (Own Work)

Project Duration

- The Project Duration using the PERT Technique is a sum of the activities on the Critical Path (highlighted in yellow in the above table).
    - The ***Critical Path Activities are identified as: 1.7, 1.8, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 9.0***
- The duration for the Critical Path is as follows:
  8+43+63+65+43+41+22+11+31 = 327 days

Chart 26: Project Critical Path

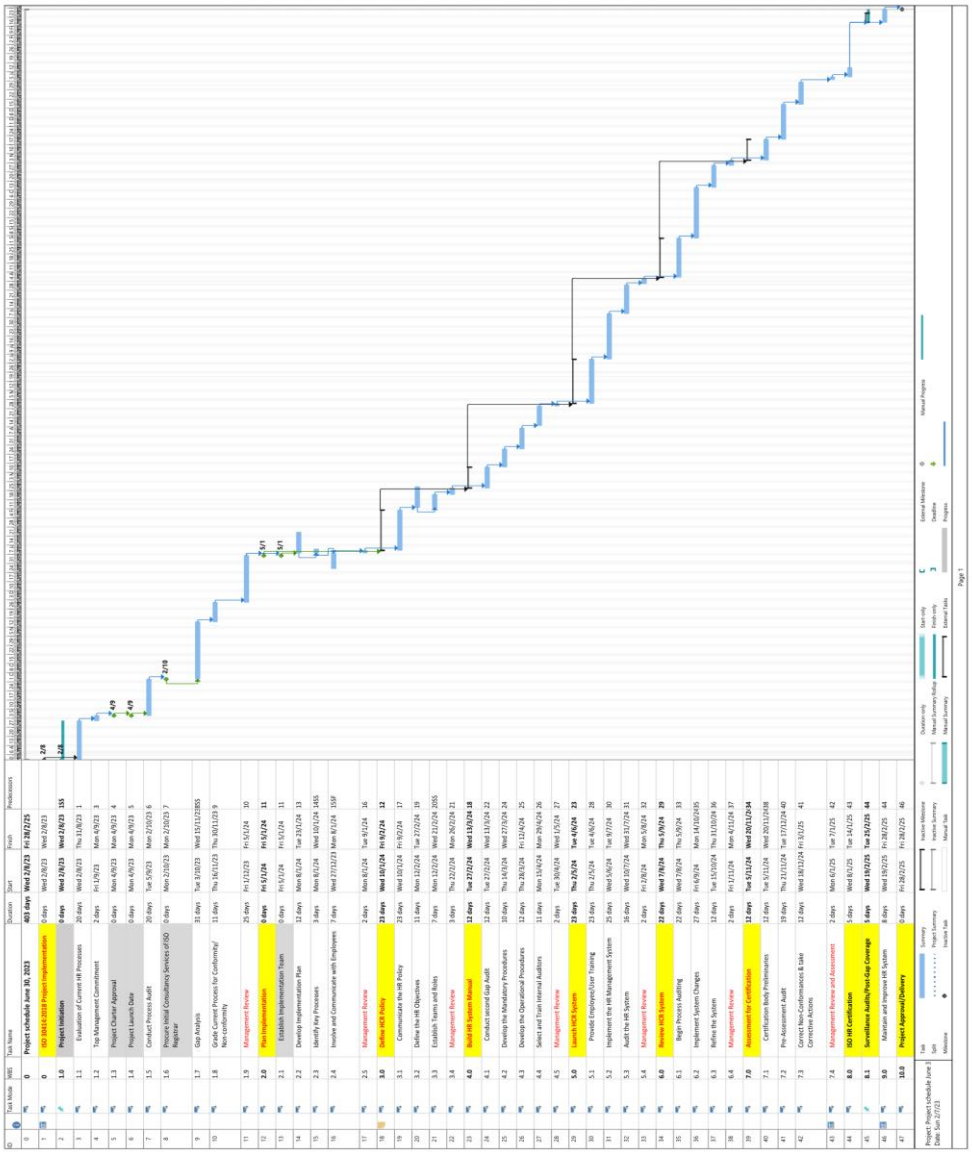


Note: Project Critical Path, Microsoft Projects (Own Work)

Develop Schedule

After sequencing the activities and estimating their duration, both the project schedule and schedule baselines are developed.

Chart 27: Schedule Gantt Chart



Note: Project Schedule Gantt Chart, Microsoft Projects (Own Work)

Control Schedule: Measuring Schedule Performance

The Earned Value Analysis (EVA) technique will be used to measure schedule performance for this project, using the Schedule variance (SV) and Schedule Performance Index (SPI) to assess variation away from the schedule.

Figure 31: Earned Value Analysis – Schedule Variance

ISO 30414:2018 PROJECT

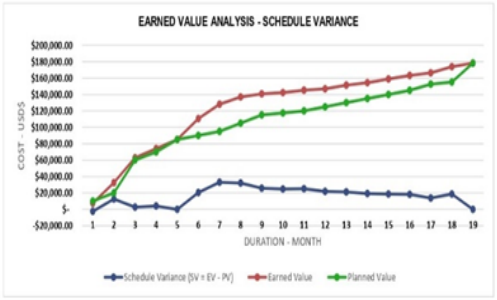
Earned Value Analysis Report

Prepared By: KERREEN WILSON
Date: SEPTEMBER 04, 2023

For Period: AUG 2023 - FEB 2025

Summary:
The Schedule Variance is positive. The Schedule Performannce Index at the end of the project is +1. This means the project will finish on schedule.

PRO MANAGEMENT LLC



Planned Value (PV) or Budgeted Cost of Work Scheduled (BCWS)

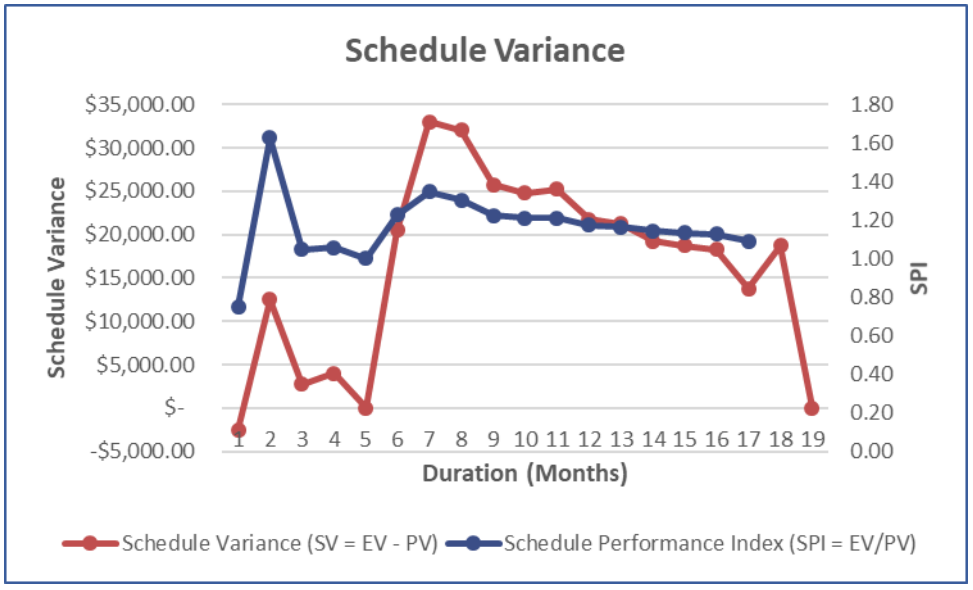
WBS	Task Name	TBC	1 AUG	2 SEP	3 OCT	4 NOV	5 DEC	6 JAN	7 FEB	8 MAR	9 APR	10 MAY	11 JUN	12 JUL	13 AUG	14 SEP	15 OCT	16 NOV	17 DEC	18 JAN	19 FEB
1	Project Initiation	$ 50,000.00	10000	10000	30000																
2	Plan Implementation	$ 30,000.00			10000	10000	10000														
3	Define HCR Policy	$ 15,000.00					5000	5000	5000												
4	Build HR System Manual	$ 20,000.00								10000	10000										
5	Launch HCR System	$ 10,000.00										2500	2500	5000		5000					
6	Review HCR System	$ 15,000.00													5000		5000				
7	Assessment & ISO Certificat	$ 10,000.00																5000	5000		
8	Surveillance Audit	$ 5,000.00																	2500	2500	
	Contingency Reserve	$ 15,500.00																			15500
	Management Reserve	$ 7,750.00																			7750
		$ -																			
		$ -																			
	Total Budgeted Cost	**$ 178,250.00**	10000	10000	40000	10000	15000	5000	5000	10000	10000	2500	2500	5000	5000	5000	5000	5000	7500	2500	23250
	Cumulative Planned Value (PV)		10000	20000	60000	70000	85000	90000	95000	105000	115000	117500	120000	125000	130000	135000	140000	145000	152500	155000	178250
	Actual Cost and Earned Value																				
	Cumulative Actual Cost (AC)		10000	20000	60000	70000	85000	90000	95000	105000	115000	117500	120000	125000	130000	135000	140000	145000	152500	155000	178250
	Cumulative Earned Value (EV)		7500	32500	62750	74000	85000	110500	128000	137000	140750	142250	145250	146750	151250	154250	158750	163250	166250	173750	178250
	Project Performance Metrics																				
	Cost Variance (CV = EV - AC)		-2500	12500	2750	4000	0	20500	33000	32000	25750	24750	25250	21750	21250	19250	18750	18250	13750	18750	0
	Schedule Variance (SV = EV - PV)		-2500	12500	2750	4000	0	20500	33000	32000	25750	24750	25250	21750	21250	19250	18750	18250	13750	18750	0
	Cost Performance Index (CPI = EV/AC)		0.75	1.63	1.05	1.06	1.00	1.23	1.35	1.30	1.22	1.21	1.21	1.17	1.16	1.14	1.13	1.13	1.09	1.12	1.00
	Schedule Performance Index (SPI = EV/PV)		0.75	1.63	1.05	1.06	1.00	1.23	1.35	1.30	1.22	1.21	1.21	1.17	1.16	1.14	1.13	1.13	1.09	1.12	1.00
	Estimated Cost at Completion (EAC)		237667	109692	170438	168615	178250	145181	132295	136615	145639	147236	147263	151831	153207	156005	157197	158323	163508	159014	178250

Note: Earned Value Analysis, Template adapted from vertex42llc (Own Work)

From the earned value analysis report, the earned value (EV) is higher than the planned value (PV), at approximately month three into the project and onwards. Both the EV and PV are equalized into the final month of the project. Based on calculations, the

schedule variance (SV) is 0, meaning that the project is right on track. The schedule performance index is 1, meaning the project is on schedule, as EV equals PV.

Figure 32: Earned Value Analysis – Schedule Performance Index



Any deviations from the schedule baseline will be managed by the project manager through an approved change request.

4.5. Project Cost Management Plan

Project Cost Management deals with all the costs associated with the execution and completion of the project. It plans for cost management, estimates the costs and determines the budget. The cost management plan takes into consideration the resources required and the cost for each resource, the budget provided for the project completion, project risks, assumptions and constraints. The plan provides guidance and direction on how the project

costs will be managed throughout the project. It outlines the metrics, cost variance considerations, and reporting activities that will govern these components. To complete this project successfully, all key project members and stakeholders must adhere to and work within this Cost Management Plan and the overall project plan it supports.

Cost Estimation

The budget for the Project is USD$178,250.00, inclusive of a 10% contingency reserve and management reserve of 5%.

Figure 33: Project Budget

Planned Value (PV) or Budgeted Cost of Work Scheduled (BCWS)

WBS	Task Name	TBC	1 AUG	2 SEP	3 OCT	4 NOV	5 DEC	6 JAN	7 FEB	8 MAR	9 APR	10 MAY	11 JUN	12 JUL	13 AUG	14 SEP	15 OCT	16 NOV	17 DEC	18 JAN	19 FEB
1	Project Initiation	$ 50,000.00	10000	10000	30000																
2	Plan Implementation	$ 30,000.00			10000	10000	10000														
3	Define HCR Policy	$ 15,000.00					5000	5000	5000												
4	Build HR System Manual	$ 20,000.00								10000	10000										
5	Launch HCR System	$ 10,000.00										2500	2500	5000		5000					
6	Review HCR System	$ 15,000.00													5000		5000				
7	Assessment & ISO Certification	$ 10,000.00																5000	5000		
8	Surveillance Audit	$ 5,000.00																	2500	2500	
	Contingency Reserve	$ 15,500.00																			15500
	Management Reserve	$ 7,750.00																			7750
		$ -																			
		$ -																			
	Total Budgeted Cost	$ 178,250.00	10000	10000	40000	10000	15000	5000	5000	10000	10000	2500	2500	5000	5000	5000	5000	5000	7500	2500	23250

Note: Project Budget Estimated Budget (Own Work)

A ‘bottom-up’ approach is used for preparing the detailed cost estimate of each cost component involved with each project activity. The budget allocation is detailed below:

The figure below shows costs for Months one to four.

Figure 34: ISO Budget Detail Estimate (Own Work)

PROJECT BUDGET CHART									
ACTIVITY ID	ACTIVITY NAME	ACTIVITY DESCRIPTION	PLANNED VALUE USD$	ACTUAL COST	Weighted %	Start	Finish	Duration (Days)	Duration (Months)
WBS0.0	*ISO 30414:2018 PROJECT IMPLEMENTATION*	*Book the project team in resource booking system.*	$178,250.00	$178,250.00		Tue 2/8/23	Sat 28/2/25	403	18.26
MONTH ONE									
WBS1.0- A000	*Project Initiation*	Develop Business Case and Feasibility studies	$7,000.00	$5,000.00	4.52%	Tue 2/8/23	Tue 2/8/23	0	0.00
WBS1.0- A001	*Evaluation of Current HR Processes*	Document current HR processes, and their effectiveness	$3,000.00	$5,000.00	1.94%	Wed 2/8/23	Thu 31/8/23	20	0.95
			$10,000.00	$10,000.00					
MONTH TWO									
WBS1.0- A002	*Top Management Commitment*	Meet with Top Management and present Business Case	$2,000.00	$2,000.00	1.29%	Fri 1/9/23	Sat 2/9/23	2	0.10
WBS1.0- A003	*Project Charter Approval*	Meet with Project Sponsor to Approve high-level requirements and sign Charter.	$2,000.00	$1,000.00	1.29%	Mon 4/9/23	Mon 4/9/23	0	0.00
WBS1.0- A004	*Project Launch Date*	Agree on Project Launch Date, and launch project	$2,000.00	$3,000.00	1.29%	Mon 4/9/23	Mon 4/9/23	0	0.00
WBS1.0- A005	*Conduct Process Audit*	Examine results from HR evaluation assessing the adequacy of internal controls and compliance, testing of transactions, records, and resources	$4,000.00	$4,000.00	2.58%	Tue 5/9/23	Mon 2/10/23	20	0.95
			$10,000.00	$10,000.00					
MONTH THREE									
WBS1.0- A006	*Procure Initial Consultancy Services of ISO*	Send out RFPs for ISO Registrar Consultancy	$12,000.00	$10,000.00	7.74%	Tue 3/10/23	Tue 3/10/23	0	0.00
WBS1.0- A007	*Gap Analysis*	Conduct Gap Analysis, to see what processes will be required for achievement of ISO dtandard	$20,000.00	$25,000.00	12.90%	Mon 4/9/23	Sun 15/10/23	31	1.48
WBS1.0- A008	*Grade Current Process for Conformity/ Non-*	Compare process results to required ISO	$8,000.00	$5,000.00	5.16%	Mon 16/10/23	Sat 28/10/23	11	0.52
			$40,000.00	$40,000.00					
MONTH FOUR									
WBS1.0- A009	*Management Review*	Meet with Management to review process gaps	$10,000.00	$10,000.00	6.45%	Sun 29/10/23	Thu 30/11/23	25	1.19
			$10,000.00	$10,000.00					

Note: Project Estimated Budget (Own Source)

The figure below shows costs for Months five to seven.

Figure 35: ISO Budget Detail Estimate (Own Work) Cont'd

PROJECT BUDGET CHART									
ACTIVITY ID	ACTIVITY NAME	ACTIVITY DESCRIPTION	PLANNED VALUE USD$	ACTUAL COST	Weighted %	Start	Finish	Duration (Days)	Duration (Months)
MONTH FIVE									
WBS2.0 - A000	*Plan Implementation*	Outline the steps that will be taken to implement the ISO certification process	$4,000.00	$3,000.00	2.58%	Fri 1/12/23	Sun 31/12/23	22	1.05
WBS2.0 - A001	*Establish Implementation Team*	Identify the Team and roles that will lead the implementation of the project	$1,000.00	$1,000.00	0.65%	Fri 1/12/23	Fri 1/12/23	0	0.00
WBS2.0 - A002	*Develop Implementation Plan*	Meet and plan with the Team the approach to the implementation plan	$2,500.00	$2,000.00	1.61%	Sat 2/12/23	Sun 17/12/23	12	0.57
WBS2.0 - A003	*Identify Key Processes*	Familiarize the Team with the key processes that have to be established (developed and	$3,500.00	$5,000.00	2.26%	Mon 18/12/23	Wed 20/12/23	3	0.14
WBS2.0 - A004	*Involve and Communicate with Employees*	Advise employees of the Project, the steps involved and their involvement in achieving ISO	$2,000.00	$2,000.00	1.29%	Thu 21/12/23	Fri 29/12/23	7	0.33
WBS2.0 - A005	*Management Review*	Meet with Management to review employee/industry response to the project	$2,000.00	$2,000.00	1.29%	Sat 30/12/23	Sun 31/12/23	2	0.10
			$15,000.00	**$15,000.00**					
MONTH SIX - SEVEN									
WBS3.0 - A000	*Define HCR Policy*	Define the rules and guidelines that will govern the employees under the ISO standard	$2,500.00	$2,000.00	1.61%	Tue 2/1/24	Wed 28/2/24	41	1.95
WBS3.0 - A001	*Communicate the HR Policy*	Advise the staff of the rules and guidelines that will govern their activities in the workplace	$1,500.00	$1,500.00	0.97%	Tue 2/1/24	Thu 1/2/24	23	1.10
WBS3.0 - A002	*Define the HR Objectives*	Define the goals that organizations will achieve through its human resource department	$2,500.00	$2,000.00	1.61%	Sat 3/2/24	Sat 17/2/24	11	0.52
WBS3.0 - A003	*Establish Teams and Roles*	Identify and communicate the new roles that will be established under the new ISO reporting standard	$1,500.00	$2,500.00	0.97%	Sun 18/2/24	Mon 26/2/24	7	0.33
WBS3.0 - A004	*Management Review*	Meet with Management to review and approve Team roles	$2,000.00	$2,000.00	1.29%	Tue 27/2/24	Thu 29/2/24	3	0.14
			$10,000.00	**$10,000.00**					

Note: Project Estimated Budget (Own Source)

The figure below shows costs for Months eight to twelve.

Figure 36: ISO Budget Detail Estimate (Own Work) Cont'd

PROJECT BUDGET CHART									
ACTIVITY ID	ACTIVITY NAME	ACTIVITY DESCRIPTION	PLANNED VALUE USD$	ACTUAL COST	Weighted %	Start	Finish	Duration (Days)	Duration (Months)
MONTH EIGHT - NINE									
WBS4.0 - A000	*Build HCR System Manual*	Build new HCR Manual	$3,500.00	$4,500.00	2.26%	Fri 1/3/24	Tue 30/4/24	43	2.05
WBS4.0 - A001	*Conduct second Gap Audit*	Evaluate enterprise data availability and system reporting capabilities to determine which	$3,500.00	$3,000.00	2.26%	Sat 2/3/24	Mon 18/3/24	12	0.57
WBS4.0 - A002	*Develop the Mandatory Procedures*	Identify the mandatory procedures that will be necessary under the ISO standard	$2,500.00	$2,500.00	1.61%	Tue 19/3/24	Sat 30/3/24	10	0.48
WBS4.0 - A003	*Develop the Operational Procedures*	Document the operational procedures that will enable the organization to maintain compliance under the ISO standard	$3,500.00	$4,000.00	2.26%	Sun 31/3/24	Sun 14/4/24	12	0.57
WBS4.0 - A004	*Select and Train Internal Auditors*	Familiarize internal auditors with the HR ISO 30414 Audit process	$5,000.00	$4,000.00	3.23%	Mon 15/4/24	Sun 28/4/24	11	0.52
WBS4.0 - A005	*Management Review*	Meet with Management to review selected Auditors and approve training plan	$2,000.00	$2,000.00	1.29%	Mon 29/4/24	Tue 30/4/24	2	0.10
			$20,000.00	**$20,000.00**					
MONTH TEN - TWELVE									
WBS5.0 - 0000	*Launch HCR System*	Launch the HCR system, including all the HR system capabilities required under the ISO standard	$2,000.00	$3,000.00	1.29%	Wed 1/5/24	Wed 31/7/24	65	3.10
WBS5.0 - 0001	*Provide Employee/User Training*	Train User on the HCR system before implementation, so that there is shared understanding, and user acceptance	$2,000.00	$1,000.00	1.29%	Wed 1/5/24	Mon 3/6/24	23	1.10
WBS5.0 - 0002	*Implement the HR Management System*	Migrate data from existing systems and set up users	$2,500.00	$1,500.00	1.61%	Tue 4/6/24	Sun 7/7/24	25	1.19
WBS5.0 - 0003	*Audit the HR System*	Audit the system to ensure that the integration and all processes work as they should	$1,500.00	$2,500.00	0.97%	Mon 8/7/24	Mon 29/7/24	16	0.76
WBS5.0 - 0004	*Management Review*	Meet with Management to review user acceptance and track usage of the system	$2,000.00	$2,000.00	1.29%	Tue 30/7/24	Wed 31/7/24	2	0.10
			$10,000.00	**$10,000.00**					

Note: Project Estimated Budget (Own Source)

The figure below shows costs for Months thirteen to seventeen.

Figure 37: ISO Budget Detail Estimate (Own Work) Cont'd

PROJECT BUDGET CHART									
ACTIVITY ID	ACTIVITY NAME	ACTIVITY DESCRIPTION	PLANNED VALUE USD$	ACTUAL COST	Weighted %	Start	Finish	Duration (Days)	Duration (Months)
		MONTH THIRTEEN - FIFTEEN							
WBS6.0 - A000	*Review HCR System*	Review system functionalities	$2,500.00	$3,000.00	1.61%	Fri 2/8/24	Thu 31/10/24	63	3.00
WBS6.0 - A001	*Begin Process Auditing*	Conduct auditing exercise to verify that processes are working within established limits	$5,000.00	$6,000.00	3.23%	Fri 2/8/24	Tue 3/9/24	22	1.05
WBS6.0 - A002	*Implement System Changes*	Document any required changes for process improvement, and implement them	$2,000.00	$1,500.00	1.29%	Wed 4/9/24	Thu 10/10/24	27	1.29
WBS6.0 - A003	*Refine the System*	Use feedback to make changes to the system ensuring that it isaligned with the scope of the project	$3,500.00	$2,500.00	2.26%	Fri 11/10/24	Tue 29/10/24	12	0.57
WBS6.0 - A004	*Management Review*	Meet with Management to review user acceptance and track usage of the system	$2,000.00	$2,000.00	1.29%	Wed 30/10/24	Thu 31/10/24	2	0.10
			$15,000.00	**$15,000.00**					
		MONTH SIXTEEN - SEVENTEEN							
WBS7.0 - A000	*Assessment for Certification*	Asses whether the system meets the relevant quality and output standards	$3,500.00	$3,000.00	2.26%	Fri 1/11/24	Tue 31/12/24	43	2.05
WBS7.0 - A001	*Certification Body Preliminaries*	Contract a certification body (independent third party) that handles the certification process in order to assure each business follows its ISO standards and conditions	$4,000.00	$5,000.00	2.58%	Fri 1/11/24	Sun 17/11/24	12	0.57
WBS7.0 - A002	*Pre-Assessment Audit*	Certification Body conducts Audit to ensure that the management system certification process is carried out in a competent, consistent and impartial manner.	$2,000.00	$1,500.00	1.29%	Mon 18/11/24	Thu 12/12/24	19	0.90
WBS7.0 - A003	*Correct Non-Conformances & take Corrective Actions*	Perform root cause analysis, identifying the causes of non-conformances, and bring issues into conformity	$1,000.00	$1,000.00	0.65%	Fri 13/12/24	Sun 29/12/24	12	0.57
WBS7.0 - A004	*Management Review and Assessment*	Meet with Management to review non-conformances and corrective action plans	$2,000.00	$2,000.00	1.29%	Mon 30/12/24	Tue 31/12/24	2	0.10
			$12,500.00	**$12,500.00**					

Note: Project Estimated Budget (Own Source)

The figure below shows costs for Months eighteen to nineteen, and the final costs including contingency and reserve costs.

Figure 38: ISO Budget (Own Work) Cont'd

PROJECT BUDGET CHART									
ACTIVITY ID	ACTIVITY NAME	ACTIVITY DESCRIPTION	PLANNED VALUE USD$	ACTUAL COST	Weighted %	Start	Finish	Duration (Days)	Duration (Months)
			MONTH EIGHTEEN - NINETEEN						
WBS8.0 - A000	*ISO HR Certification*	Facilitate External Audit in order to achieve certification	$1,000.00	$1,500.00	0.65%	Thu 2/1/25	Wed 8/1/25	5	0.24
WBS8.1 - A001	*Surveillance Audits/Post-Gap Coverage*	ISO Registrar conducts Audit to ensure the company is still meeting the key elements of the ISO standard.	$1,000.00	$1,000.00	0.65%	Thu 9/1/25	Tue 21/1/25	9	0.43
WBS9.0 - A000	*Maintain and Improve HR System*	Make any improvements based on surveillance audit	$500.00		0.32%	Wed 22/1/25	Fri 31/1/25	8	0.38
WBS10.0 - A000	*Project Approval/Delivery*	Project sign-off by Sponsor Meets all requirements for success criteria and scope	$0.00	$0.00	0.00%	Sat 28/2/25	Sat 28/2/25	0	0.00
			$2,500.00	**$2,500.00**					
	Subtotal		**$155,000.00**	**$155,000.00**	100.00%				
	Contingency reserve		**$15,500.00**	**$15,500.00**					
	Management Reserve		**$7,750.00**	**$7,750.00**					
	Total Project Cost		**$178,250.00**	**$178,250.00**					

Determine Budget

After estimating the costs per activity, considering all the basis of estimates, the activity costs are then aggregated into the project cost baseline. It includes all the cost of the deliverables, and is used in measuring the performance of the project. The cost baseline USD$170,500.00 for the project includes the contingency reserves of USD$15,500.00 (USD$155,000.00 + USD$15,500.00). In determining the project budget, all risks are considered. The project budget is the cost baseline plus the management reserves

(USD$170,500.00 + USD$7,750.00). Contractual agreements such as procurement contracts and the resource schedule are utilized. The cumulative budget is shown below:

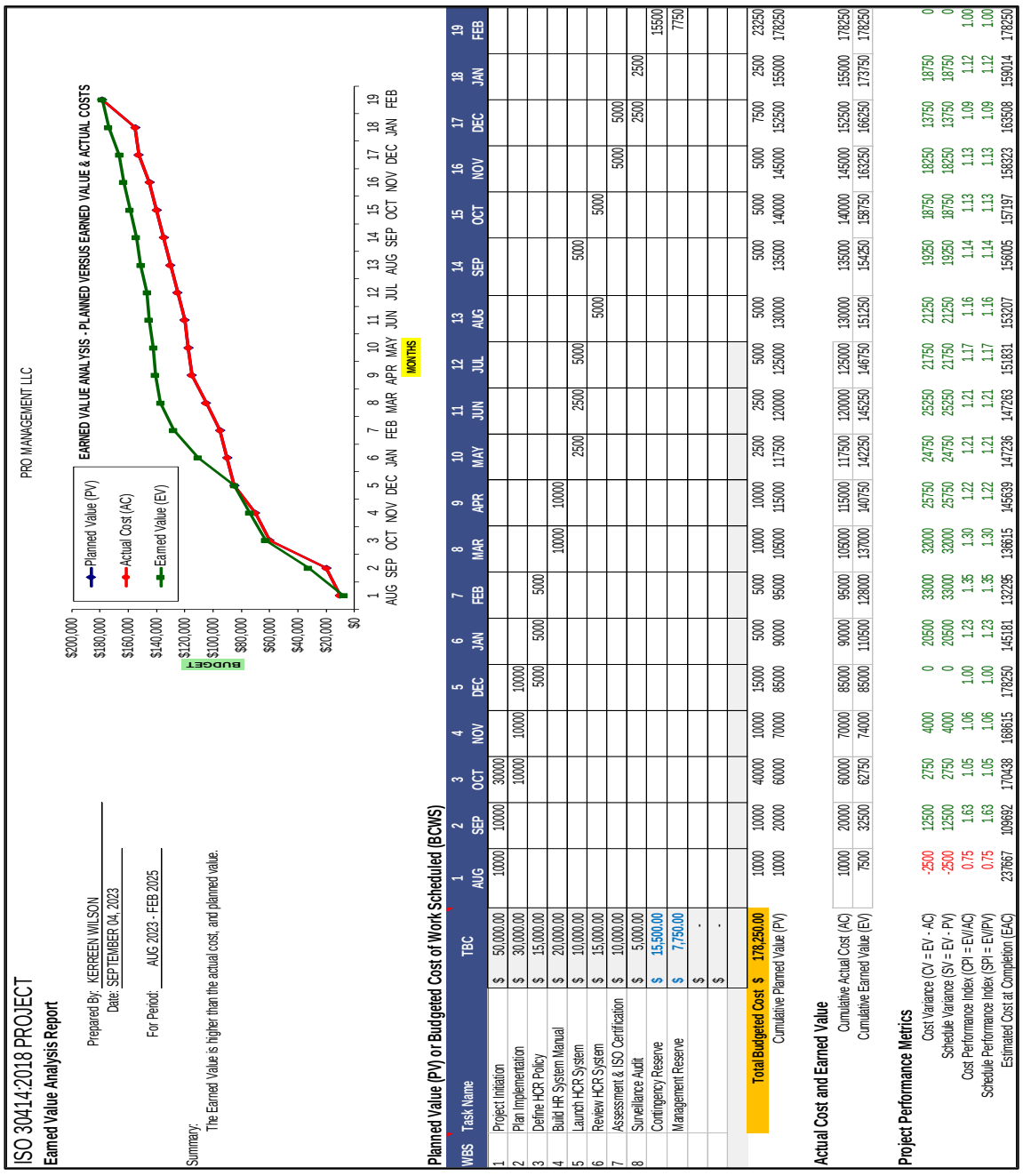
Figure 39: Cumulative Budget

CUMULATIVE BUDGET									
MONTH	TOTAL BUDGETED COST	PV	AC	EV	SV	SPI	CV	CPI	EAC
0	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 7,500.00	-$ 2,500.00	0.75	-2,500.00	0.75	$ 237,666.67
1	$ 10,000.00	$ 20,000.00	$ 20,000.00	$ 32,500.00	$ 12,500.00	1.63	12,500.00	1.63	$ 109,692.31
2	$ 40,000.00	$ 60,000.00	$ 60,000.00	$ 62,750.00	$ 2,750.00	1.05	2,750.00	1.05	$ 170,438.25
3	$ 10,000.00	$ 70,000.00	$ 70,000.00	$ 74,000.00	$ 4,000.00	1.06	4,000.00	1.06	$ 168,614.86
4	$ 15,000.00	$ 85,000.00	$ 85,000.00	$ 85,000.00	$ -	1.00	0.00	1.00	$ 178,250.00
5	$ 5,000.00	$ 90,000.00	$ 90,000.00	$110,500.00	$ 20,500.00	1.23	20,500.00	1.23	$ 145,181.00
6	$ 5,000.00	$ 95,000.00	$ 95,000.00	$128,000.00	$ 33,000.00	1.35	33,000.00	1.35	$ 132,294.92
7	$ 10,000.00	$105,000.00	$ 105,000.00	$137,000.00	$ 32,000.00	1.30	32,000.00	1.30	$ 136,614.96
8	$ 10,000.00	$115,000.00	$ 115,000.00	$140,750.00	$ 25,750.00	1.22	25,750.00	1.22	$ 145,639.43
9	$ 2,500.00	$117,000.00	$ 117,000.00	$142,250.00	$ 25,250.00	1.22	25,250.00	1.22	$ 146,609.84
10	$ 2,500.00	$120,000.00	$ 120,000.00	$145,250.00	$ 25,250.00	1.21	25,250.00	1.21	$ 147,263.34
11	$ 5,000.00	$125,000.00	$ 125,000.00	$146,750.00	$ 21,750.00	1.17	21,750.00	1.17	$ 151,831.35
12	$ 5,000.00	$130,000.00	$ 130,000.00	$151,250.00	$ 21,250.00	1.16	21,250.00	1.16	$ 153,206.61
13	$ 5,000.00	$135,000.00	$ 135,000.00	$154,250.00	$ 19,250.00	1.14	19,250.00	1.14	$ 156,004.86
14	$ 5,000.00	$140,000.00	$ 140,000.00	$158,750.00	$ 18,750.00	1.13	18,750.00	1.13	$ 157,196.85
15	$ 5,000.00	$145,000.00	$ 145,000.00	$163,250.00	$ 18,250.00	1.13	18,250.00	1.13	$ 158,323.12
16	$ 7,500.00	$152,000.00	$ 152,000.00	$166,250.00	$ 14,250.00	1.09	14,250.00	1.09	$ 162,971.43
17	$ 2,500.00	$155,000.00	$ 155,000.00	$173,750.00	$ 18,750.00	1.12	18,750.00	1.12	$ 159,014.39
17.22	$ 23,250.00	$178,250.00	$ 178,250.00	$178,250.00	$ -	1.00	0.00	1.00	$ 178,250.00
	TOTAL PROJECT BUDGET			$178,250.00					

Note: Cumulative Budget (Own work)

To keep the project on budget, the project manager compares the planned work with the actual work done. This actual work is called performance data. Any variance between the actual and planned costs are tracked. The figure below shows the budgeted cost of work, and breaks down the Earned Value and Actual Costs over the project period.

Figure 40: Budgeted Cost of Work Performed



ISO 30414:2018 PROJECT

PRO MANAGEMENT LLC

Earned Value Analysis Report

Prepared By: KERREEN WILSON

Date: SEPTEMBER 04, 2023

For Period: AUG 2023 - FEB 2025

Summary:

The Earned Value is higher than the actual cost, and planned value.

EARNED VALUE ANALYSIS - PLANNED VERSUS EARNED VALUE & ACTUAL COSTS

Planned Value (PV)

Actual Cost (AC)

Earned Value (EV)

BUDGET

$200,000 $180,000 $160,000 $140,000 $120,000 $100,000 $80,000 $60,000 $40,000 $20,000 $0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB

MONTHS

Planned Value (PV) or Budgeted Cost of Work Scheduled (BCWS)

WBS	Task Name	TBC	1 AUG	2 SEP	3 OCT	4 NOV	5 DEC	6 JAN	7 FEB	8 MAR	9 APR	10 MAY	11 JUN	12 JUL	13 AUG	14 SEP	15 OCT	16 NOV	17 DEC	18 JAN	19 FEB
1	Project Initiation	$ 50,000.00	10000	10000	30000																
2	Plan Implementation	$ 30,000.00			10000	10000	10000														
3	Define HCR Policy	$ 15,000.00					5000	5000	5000												
4	Build HR System Manual	$ 20,000.00								10000	10000										
5	Launch HCR System	$ 10,000.00										2500	2500	5000		5000					
6	Review HCR System	$ 15,000.00													5000		5000		5000		
7	Assessment & ISO Certification	$ 10,000.00																5000	5000		
8	Surveillance Audit	$ 5,000.00																	2500	2500	
	Contingency Reserve	$ 15,500.00																			15500
	Management Reserve	$ 7,750.00																			7750
		$ -																			
		$ -																			
	Total Budgeted Cost	**$ 178,250.00**	10000	10000	40000	10000	15000	5000	5000	10000	10000	2500	2500	5000	5000	5000	5000	5000	7500	2500	23250
	Cumulative Planned Value (PV)		10000	20000	60000	70000	85000	90000	95000	105000	115000	117500	120000	125000	130000	135000	140000	145000	152500	155000	178250

Actual Cost and Earned Value

Cumulative Actual Cost (AC)		10000	20000	60000	70000	85000	90000	95000	105000	115000	117500	120000	125000	130000	135000	140000	145000	152500	155000	178250
Cumulative Earned Value (EV)		7500	32500	62750	74000	85000	110500	128000	137000	140750	142250	145250	146750	151250	154250	158750	162250	166250	173750	178250

Project Performance Metrics

Cost Variance (CV = EV - AC)	-2500	12500	2750	4000	0	20500	33000	32000	25750	24750	25250	21750	21250	19250	18750	18250	13750	18750	0	
Schedule Variance (SV = EV - PV)	-2500	12500	2750	4000	0	20500	33000	32000	25750	24750	25250	21750	21250	19250	18750	18250	13750	18750	0	
Cost Performance Index (CPI = EV/AC)	0.75	1.63	1.05	1.06	1.00	1.23	1.35	1.30	1.22	1.21	1.21	1.17	1.16	1.14	1.13	1.13	1.09	1.12	1.00	
Schedule Performance Index (SPI = EV/PV)	0.75	1.63	1.05	1.06	1.00	1.23	1.35	1.30	1.22	1.21	1.21	1.17	1.16	1.14	1.13	1.13	1.09	1.12	1.00	
Estimated Cost at Completion (EAC)	237667	109692	170438	168615	178250	145181	132295	136515	145639	147236	147263	151831	153207	156055	157197	158323	163508	159014	178250	

Note: Planned or Budgeted Cost of Work (Own Source)

The figure below shows the actual costs of work performed and the cumulative costs over the period:

Figure 41: Actual Costs of Work Performed

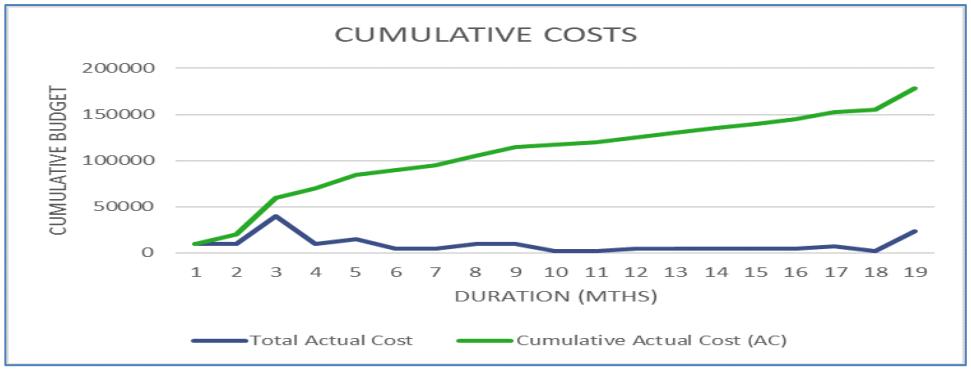
Actual Cost (AC) of Work Performed

WBS	Task Name	1 AUG	2 SEP	3 OCT	4 NOV	5 DEC	6 JAN	7 FEB	8 MAR	9 APR	10 MAY	11 JUN	12 JUL	13 AUG	14 SEP	15 OCT	16 NOV	17 DEC	18 JAN	19 FEB
1	Project Initiation	10000	10000	30000																
2	Plan Implementation			10000	10000	10000														
3	Define HCR Policy					5000	5000	5000												
4	Build HR System Manual								10000	10000										
5	Launch HCR System										2500	2500	5000		5000					
6	Review HCR System													5000		5000				
7	Assessment & ISO Certification																5000	5000		
8	Surveillance Audit																	2500	2500	
-	Contingency Reserve																			15500
-	Management Reserve																			7750
-	.																			
-	.																			
	Total Actual Cost	10000	10000	40000	10000	15000	5000	5000	10000	10000	2500	2500	5000	5000	5000	5000	5000	7500	2500	23250
	Cumulative Actual Cost (AC)	10000	20000	60000	70000	85000	90000	95000	105000	115000	117500	120000	125000	130000	135000	140000	145000	152500	155000	178250

Note: Actual and Cumulative Costs (Own Source)

The figure bellows shows a graph representing the total cumulative costs versus the actual costs.

Figure 42: Cumulative Actual Costs



Note: Cumulative and Actual Cost Graph (Own Source)

The figure below shows the cumulative earned value over the period:

Figure 43: Cumulative Earned Value

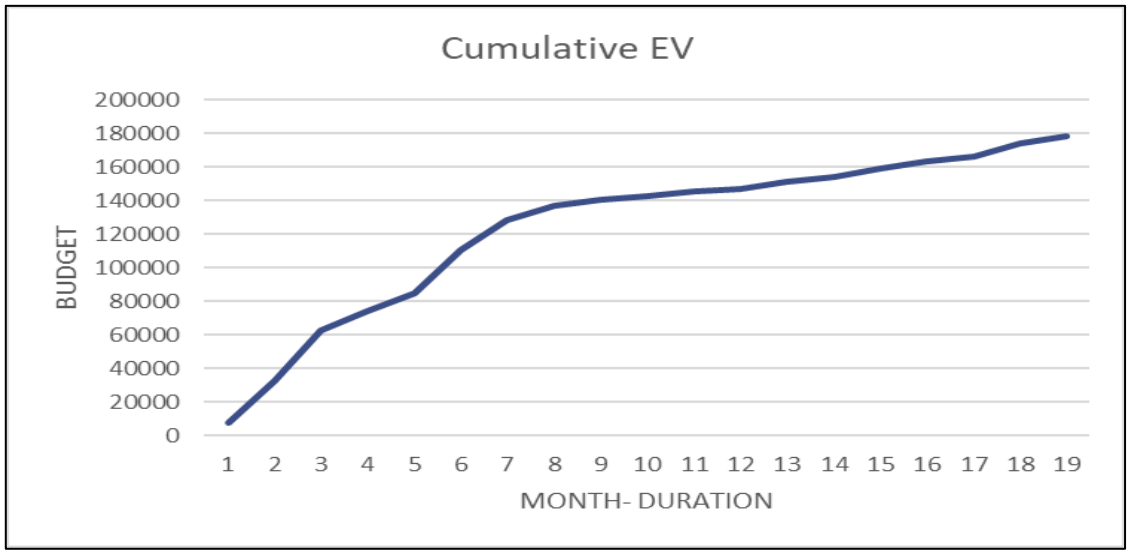
Cumulative Earned Value (EV)

WBS	Task Name	TBC	1 AUG	2 SEP	3 OCT	4 NOV	5 DEC	6 JAN	7 FEB	8 MAR	9 APR	10 MAY	11 JUN	12 JUL	13 AUG	14 SEP	15 OCT	16 NOV	17 DEC	18 JAN	19 FEB
1	Project Initiation	50000	15%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2	Plan Implementation	30000		25%	30%	60%	75%	90%	100%				10%	10%	20%	20%	35%	100%	80%	100%	100%
3	Define HCR Policy	15000			25%	40%	50%	100%	100%	25%	50%	60%	60%	70%	80%	100%	100%		60%	70%	100%
4	Build HR System Manual	20000					25%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
5	Launch HCR System	10000						25%	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
6	Review HCR System	15000							50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
7	Assessment & ISO Certific	10000								100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
8	Surveillance Audit	5000								100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
-	Contingency Reserve	15500								100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
-	Management Reserve	7750								100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
-	-	0																			
-	-	0																			
	Cumulative EV		7500	32500	62750	74000	85000	110500	128000	137000	140750	142250	145250	146750	151250	154250	158750	163250	166250	173750	178250

Note: Cumulative Earned Value (Own Source)

The figure bellows shows a graph representing the total cumulative costs versus the actual costs.

Figure 44: Cumulative Earned Value



Note: Cumulative Earned Value Graph (Own Source)

Cost control

The process of controlling costs involves monitoring and updating any changes to the project cost baseline, and ultimately overall project costs. The project will use the Earned Value Management (EVM) approach to measure and control costs at the detailed work level, and also to track the spending for the project, to include: Cost Variance (CV), Schedule Variance (SV), Cost Performance Index (CPI) and Schedule Performance Index (SPI).

Cost Variance

The cost variance response process defines the control thresholds for the project and what actions will be taken if the project triggers a control threshold. As a part of the response process, the project management team typically presents options for corrective action to the project sponsor.

Project Performance Metrics

Project performance metrics helps the project manager to track the project baselines: cost, schedule, scope, and quality. Keeping track can allow a view of the project's status, at any point in time, whether it is leading or lagging in its schedule, experiencing cost overruns, or being deficient in its quality output. The figure below shows the performance metrics utilized in the project.

Figure 45: Project Performance Metrics ((Hartney, 2022)

EARNED VALUE FORMULAS AND INTERPRETATION				
Symbol	**Name**	**Formula**	**Description**	**Interpretation of Result**
Inputs				
PV	Planned Value		The value of the portion of the task that is supposed to have been completed	
EV	Earned Value		The value of the portion of the task that is actually completed	
AC	Actual Cost		The actual cost of the task to date	
BAC	Budget at Completion		Total overall project budget (planned)	
Outputs – Current Status				
SV	Schedule Variance	SV = EV – PV	The amount that the task is ahead or behind schedule, expressed as a task value	SV < 0 = behind schedule SV > 0 = ahead of schedule
SPI	Schedule Performance Index	SPI = EV/PV	The amount that the task is ahead or behind schedule, expressed as a percentage of the task	SPI < 1 = behind schedule SPI > 1 = ahead of schedule
CV	Cost Variance	CV = EV – AC	The amount that the task is over or under budget, expressed as a task value	CV < 0 = over budget CV > 0 = under budget
CPI	Cost Performance Index	CPI = EV/AC	The amount that the task is ahead or behind schedule, expressed as a percentage of the task	CPI < 1 = over budget CPI > 1 = under budget
Outputs – Forecast				
EAC	Estimate at Completion	EAC = BAC/CPI EAC = AC + (BAC – EV) EAC = AC + [(BAC – EV)/(SPI x CPI)] EAC = AC + ETC	The estimated project budget at the end of the project, given current project budget status	
ETC	Estimate to Complete	ETC = EAC – AC ETC = new estimate	The expected cost to finish the project	
VAC	Variance at Completion	VAC = BAC – EAC	The expected cost variance at the end of the project, given current project status	VAC < 0 = over budget VAC > 0 = under budget
TCPI	To Complete Performance Index	TCPI = (BAC – EV) / (BAC – AC) TCPI = (BAC – EV) / (EAC – AC)	The CPI required to complete the project on budget	TCPI < 1 = under budget TCPI > 1 = over budget

Note: Earned Value Formulas and Interpretation, Adapted from Project Engineer

The Earned Value Analysis of the project is captured below:

Figure 46: Earned Value Analysis for the Project

Total Budgeted Cost	$ 178,250.00																			
Cumulative Planned Value (PV)		10000	20000	60000	70000	85000	90000	95000	105000	115000	117500	120000	125000	130000	135000	140000	145000	152500	155000	178250
Actual Cost and Earned Value																				
Cumulative Actual Cost (AC)		10000	20000	60000	70000	85000	90000	95000	105000	115000	117500	120000	125000	130000	135000	140000	145000	152500	155000	178250
Cumulative Earned Value (EV)		7500	32500	62750	74000	85000	110500	128000	137000	140750	142250	145250	146750	151250	154250	158750	163250	166250	173750	178250
Project Performance Metrics																				
Cost Variance (CV = EV - AC)		-2500	12500	2750	4000	0	20500	33000	32000	25750	24750	25250	21750	21250	19250	18750	18250	13750	18750	0
Schedule Variance (SV = EV - PV)		-2500	12500	2750	4000	0	20500	33000	32000	25750	24750	25250	21750	21250	19250	18750	18250	13750	18750	0
Cost Performance Index (CPI = EV/AC)		0.75	1.63	1.05	1.06	1.00	1.23	1.35	1.30	1.22	1.21	1.21	1.17	1.16	1.14	1.13	1.13	1.09	1.12	1.00
Schedule Performance Index (SPI = EV/PV)		0.75	1.63	1.05	1.06	1.00	1.23	1.35	1.30	1.22	1.21	1.21	1.17	1.16	1.14	1.13	1.13	1.09	1.12	1.00
Estimated Cost at Completion (EAC)		237667	109692	170438	168615	178250	145181	132295	136615	145639	147236	147263	151831	153207	156005	157197	158323	163508	159014	178250

Note: Earned Value Analysis (Template adapted from Vertex 42) Information, Own Source

The Cost and Schedule Variances at the end of the project is USD$0.00, which means that the project is both on schedule and on budget. The Schedule Performance Index (SPI) and Cost Performance Index (CPI) are also equal to 1. This means that the project performance is within budget and on schedule.

Measuring Percentage Completeness

Project complete percentage, shows how much work has been done and how much work there is to do. The project was measured at 30%, 50% and 70% complete, to see the work that would need to be done in order to align the project with schedule. The values are displayed below.

Figure 47: Measuring Performance - Percentage Complete

PERCENTAGE COMPLETE	AC	DURATION MONTHS	PV	EV	SV	SPI	CV	CPI	EAC1	EAC2	EACt (Months)
30 PERCENT	$ 60,000.00	5.48	$ 60,000.00	$ 62,750.00	$ 2,750.00	1.05	$ 2,750.00	1.05	57,370.52	57,250.00	5.24
50 PERCENT	$ 90,000.00	9.13	$ 90,000.00	$ 110,500.00	$ 20,500.00	1.23	$ 20,500.00	1.23	73,303.17	69,500.00	7.44
70 PERCENT	$ 125,000.00	12.78	$ 125,000.00	$ 146,750.00	$ 21,750.00	1.17	$ 21,750.00	1.17	106,473.59	103,250.00	10.89
100 PERCENT	$ 178,250.00	18.26	$ 178,250.00	$ 178,250.00	$ 45,000.00	1.00	$ -	1.00	178,250.00	178,250.00	18.26

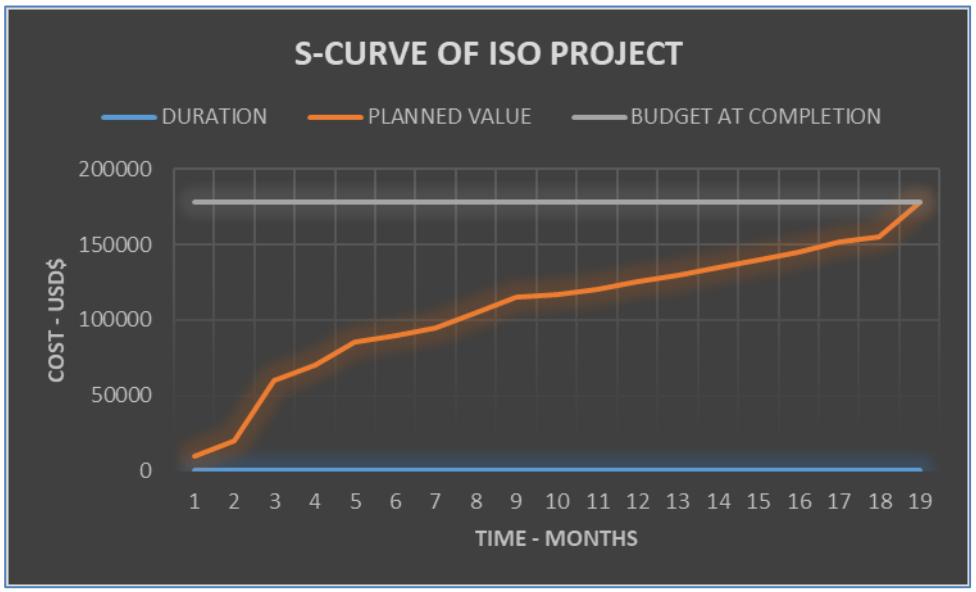
Note: Percentage Complete Chart (Own Source)

The chart indicates that it will take 18.26 months to complete 100% of the work, 12.78 months to complete 70% of the work, 9.13 months to complete 50% and 5.48 months to complete 30% of the work. At 100% complete, the project's CPI is equal to 1 and the SPI equal to 1.4 respectively. This means that the project is on schedule and within budget. Between 30% and 70% complete, the CPI and SPI for the project are over 1, meaning that the project is under budget and ahead of schedule at these points.

S-Curve

An s-curve is a statistical graph that accurately depicts the cumulative data needed the project or activity. An s-curve will be used to monitor the project success because the real-time cumulative data of various project elements on it can be compared with projected data. During the project lifecycle, the project manager can plot actual resource use to see how well it matches what's expected. If there's a gap between them, it's an opportunity to make corrections on how resources are being used.

Figure 48:S-Curve



Note: Project Budget S-Curve (Own Source)

4.6. Project Quality Management Plan

The quality management plan includes the following processes: Plan quality management, Manage Quality and Control Quality. The Quality Management Plan applies to project deliverables and project work processes. Quality control activities monitor and verify that project deliverables meet defined quality standards. Quality assurance activities monitor and verify that the processes used to manage and create the deliverables are followed and are effective.

Quality Management Approach

The project quality management approach describes how quality will be planned, managed and controlled in the project. This includes the specific processes and procedures techniques, standards, (Inputs, Tools and Techniques and the various outputs) and identifies the person responsible for monitoring quality on the project.

Chart 28: Approach to Quality Management

APPROACH TO QUALITY MANAGEMENT		
WHAT TO DO	**HOW TO DO IT**	**RESPONSIBLE**
Identify Quality Objectives		
Identify the overall quality objectives for the project	State the quality objectives in terms of the project objectives and/or organizational objectives. Determine quality objectives for the product with the customer.	**Project Manager**
Identify Quality Roles, Tools & Techniques, and Problem-reporting procedures (Plan & Manage)		
Identify the quality control and quality assurance roles and responsibilities for the project and actual resources assigned Identify any quality-related tools used to support quality Define the quality control and quality assurance problem reporting plan	The quality roles and responsibilities were identified in the Quality Management Plan, and actual resources assigned Identify the tools to be used and their purposes or use Describe the plan to itemize, document and track to closure items reported through the quality control and quality assurance activities.	**Project Manager**
Identify Quality Control (Control Quality)		
Identify the key project deliverables that will be subject to quality review Identify the standards that will be used to evaluate the quality of project deliverables Identify the completeness and correctness criteria Describe the Quality Control activities the project will use to ensure quality standards for project deliverables are met Determine how often or when the quality control activity will be performed	The key deliverables are the results that need to be delivered fit-for-purpose as identified in the project charter Identify the relevant deliverable quality standards, or "measures" used to determine a successful outcome for a deliverable Completeness and correctness criteria are defined from the customer's point of view. Work with the customer to define a "complete and correct" deliverable. The deliverables are evaluated against these criteria before they are formally approved Quality Control makes sure the results of what you have done are what you expected. Quality control is product oriented. For each deliverable, describe the quality control activities you will execute Establish the timeframe or recurring frequency for performing the quality control activity.	**Project Manager**
Quality Assurance		
Identify the critical project processes that will be subject to quality review Identify the relevant process quality standards for evaluating the quality of the project processes Identify stakeholder expectations for project processes Describe the Quality Assurance activities to be used to ensure the quality standards for project processes are met Determine how often or when the quality assurance activity will be performed	Critical project processes are the activities that must be undertaken correctly and effectively to create the deliverables Identify the relevant process quality standards, or "measures" used to determine a successful outcome for a deliverable Work with the project stakeholders to define what it means for a project process to meet their expectations. The project process is then evaluated against these expectations Quality Assurance makes sure you are doing the right things, the right way. Quality Assurance is process oriented. Quality assurance refers to the internal work processes used to manage and deliver the solution Establish the timeframe or recurring frequency for performing the quality assurance activity	**Project Manager**

Note: Approach to Quality Management (Own Source)

Plan Quality Management process identifies the quality requirements or standards for the project, and documents how the project will achieve each quality standard. The following quality standards have been identified by stakeholders.

Chart 29:Key Customer Quality Requirements

Project Customer(s)	Customer Requirements
Sponsor	Ability to functionally integrate with the industries other standards; Must be completed on time and within budget; Source document must be easily accessible and retrievable; Knowledge must be easily transferable; Must be compliant with ISO Standard 30414:2018; Must be affordable and profitable
External Customers	Functional integration; Customer friendly; Regulatory compliant
Internal Customers	Ease of use; Functional integration; Regulatory compliant; Completed within budget and on time; Must be affordable

Note: Customer Quality Requirements, Own Source

Manage Quality

The project manager must ensure that the necessary steps are taken for deliverables to meet their quality requirements. A checklist will be developed to verify that the deliverables are meeting the quality standard. Quality Audits will be conducted to verify that the checklists, and other procedures and policies are being followed. The organization policy statement is also used as a tool in managing quality. This quality policy provides a framework for setting, monitoring, reviewing and achieving our objectives, programmes and targets.

Chart 30: Organization Quality Policy Statement

It is the policy of the HR industry in Jamaica to maintain a quality system designed to meet the requirements of ISO 30414:2018, ISO 9001:2015, or any other standard in line with ISO in pursuit of its primary objectives, and the purpose and context of the manufacturing industry. The Company has developed its expertise since its establishment and its aim is to achieve a high standard of construction and service to its customers.

It is the policy of the industry to maintain a management system that will achieve these objectives and seek continual improvement in the effectiveness and performance of our management system based on "risk"; provide all the resources of equipment, trained and competent staff and any other requirements to enable these objectives to be met; comply with all legal requirements, codes of practice and all other requirements applicable to our activities; and strive to satisfy the requirements of all of our customers, stakeholders and interested parties whenever possible, meeting and exceeding their expectations.

The Directors, Management and Staff are responsible for Quality Control through the Quality Management System seeking improvement by constant review, with suppliers and sub-contractors being encouraged to co-operate. The Industry is committed to achieving customer satisfaction by the use of quality procedures which will be operated to meet or exceed the requirements of ISO 9001.

To ensure the company maintains its awareness for continuous improvement, the quality system is regularly reviewed by "The Directors" to ensure it remains appropriate and suitable to our business. The Quality System is subject to both internal and external annual audits.

The Company Directors

Dated 03/04/2023

Note: Quality Policy Statement: (Own Work)

The following are quality attributes or key factors which guide the quality objective of the project. These are performance measures that help to monitor the quality of the project.

Figure 49: Key Factors Relating to Quality

KEY FACTORS RELATING TO QUALITY			
Type	**Factor**	**Factor Definition**	**Quality Objective**
Technical	Integration	Ability to functionally integrate with the industries other standards	System must contain all the HR functionalities that enable it to generate reports
Cost	Project Budget	Must not exceed the established budget	Complete project within established budget
Time	Project Schedule	Must not exceed the established schedule	Complete project by or before established end date
Technical	Usability	HCR systems manual must be easily accessible and retrievable	Users must find it easy to access the system and to retirieve and generate data
Technical	Security	Data protection from unauthorized access, corruption or theft	Data must be encrypted, and user access password-protected
Process	Data Integrity	Overall accuracy, completeness and consistency of the data; data safety	Data must be 100% accurate at all times
Technical	Performance	Considers the system's ability to generate human capital reports	System must be able to generate required reports 100% of the time, except on down-time
Process	Credibility	Must be compliant with ISO Standard 30414:2018	All processes must be 100% compliant with the ISO 30414:2018 Quality Checklist
Training	Evaluations	Assess end user evaluation and knowledge of the system	All trained users must have 100% success rate of evaluation

Note: Quality Factors (Own Work)

The requirements, risk, stakeholder information and assumption log will be utilized in planning the quality metrics. The quality metrics for the project is detailed below.

Figure 50: Quality Metrics

PROJECT QUALITY METRICS AND BASELINE						
Main Project Deliverables (Quality Objective)	**Metric** (Measurement)	**Metric Definition**	**Goals** (Expected Outcome)	**Responsibility** (Which Team Member)	**Baseline/ Measurement Frequency** (minimum standard or maximum tolerance)	**Assurance Actions** (actions that you would take before and during implementation to get to the goal)
Executed Employee/User Training	# of training sessions implemented # of persons trained	100% ISO 30414:2018 compliant	160 hours of Training over 6 mth period At least 100 Users trained	HR Consultant	Minimum of 4 sessions conducted per month	Review and sign off on training plan at least 1 week before implementing Confirm and remind trainer 2 days before event Assign backup trainer
Executed Internal Auditor Training	# of training sessions implemented # of persons trained	100% ISO 30414:2018 compliant	At least 20 Auditors trained per mth, over 6 mths	ISO Consultant	Minimum of 2 sessions conducted per month	Review and sign off on training plan at least 1 week before implementing Confirm and remind trainer 2 days before event
Procurement	% of goods ordered to specification	99% of goods ordered to specification	100% of good correctly ordered	Purchasing Department	As is necessary	Checklists to verify order status - Follow procurement guidelines - place order with reputable/seasoned vendor
Installed Software	# of equipment correctly installed	0 defects – all equipment must be installed correctly	100% of equipment to be compliant with specifications	Technician	After each system Refinement and changes	Insist that technician follow manufacturers recommendations - conduct daily inspections - engage technician with reputation of high quality installations
Certification audit	# of times Audit conducted	100% ISO Certified	100% Certification in ISO	ISO Consultant	once after system verified	Review and sign off on verification reports
Surveillance and Gap Audit	# of identified gaps # of corrective actions taken	0 defects, non-conformances	100% compliance with ISO	Project Manager	after each Management Review	Review Audit checklist and surveillance reports
HR System Manual	# of Manuals published	100% ISO compliant	100% completion of manual	Project Manager	At least 5 Manuals published by Month 12	Review ISO 30414:2018 checklists Review Management Reports and UATs

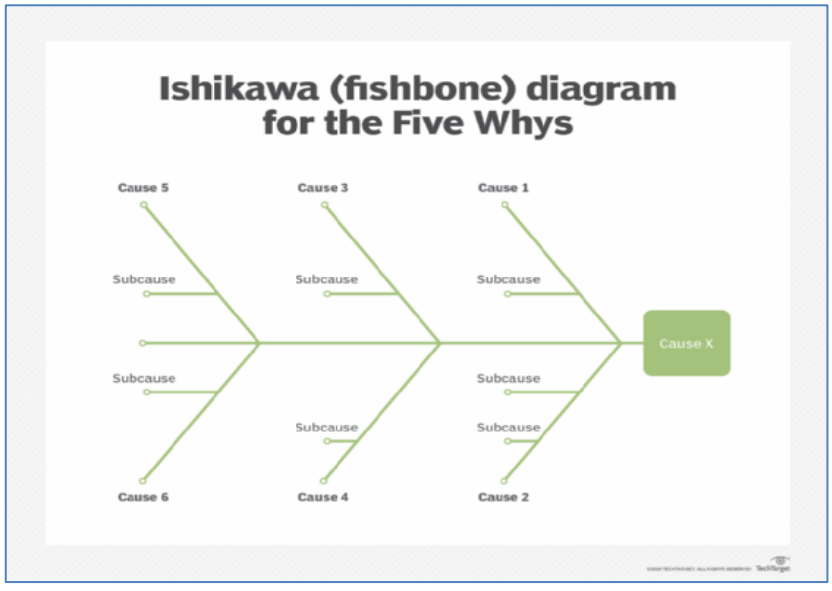
Note: Project Quality Metrics (Own Source)

Control Quality

A Root Cause Analysis (RCA) is used to identify the core of any identified problem and brainstorm to find ways of solving the issue. The process is to first define the problem or goal, brainstorm possible root causes, devise solutions, implement solutions and monitor the results.

Arising from this exercise, a cause-and-effect (Ishikawa/ Herring bone) diagram can be used to represent the causes and defects. Usually, the project manager will lead what is called a Five-Whys-Analysis to arrive to explore the underlying cause-and-effect of particular problems. The primary goal is to determine the root cause of a defect or a problem by successively asking the question "Why?" It is generally believed that it takes five iterations of the questioning process for the group to arrive at the root cause of a problem (Chai, n.d.) An example of the Cause and Effect Diagram is shown below:

Figure 51: Ishikawa (Fishbone Diagram) (Chai, n.d.)



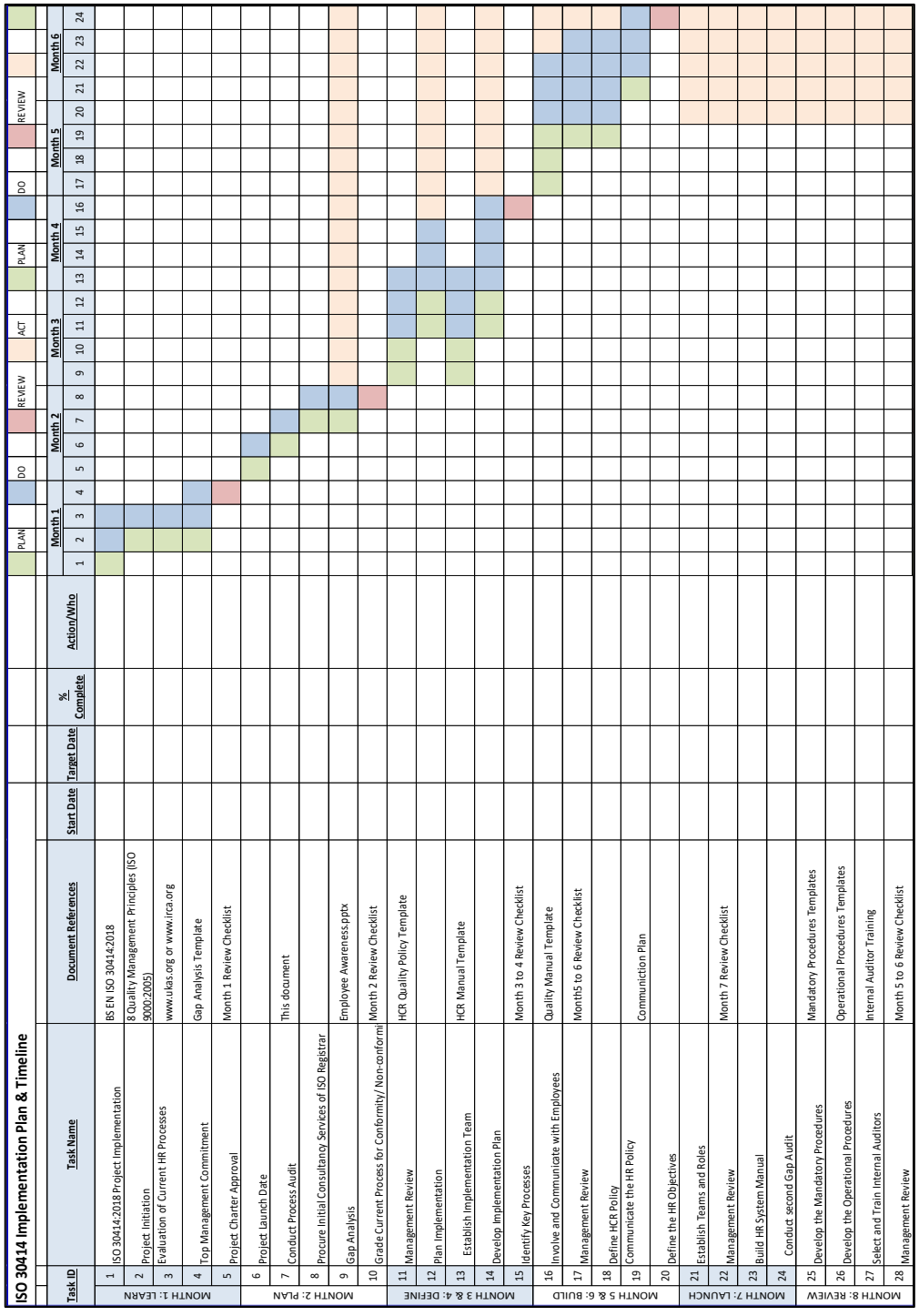
Note: Ishikawa Diagram, (Adapted from Tech Target) (Chai, n.d.)

The Plan-Do-Check-Act cycle (PCDA) technique will be used to monitor the project quality, by detecting and scrutinizing any sources of variation that would cause the project to deviate from customer requirements. Basically, Plan-Do-Check-Act means to Plan: Design or Revise business processes; Do: Implement the plan and measure the performance; Check: Access the measurements and report the results to decision-makers; and Act: Decide on changes needed to improve the processes. The PDCA cycle was developed by the American statistician William Deming (1900-1993) and is the go-to model for continuous improvement. (My ISO Genius, n.d.)

In particular, ISO standard uses the PCDA cycle and it can be found very distinctly in the ISO 9001 'Quality Management' standard requirements, and the cycle is woven into the structure of the standard. The advantage of following the PDCA Cycle is that it automatically brings about continuous improvement. The ultimate goal of the PDCA cycle is to ensure that everyone in an organization is continuously improving.

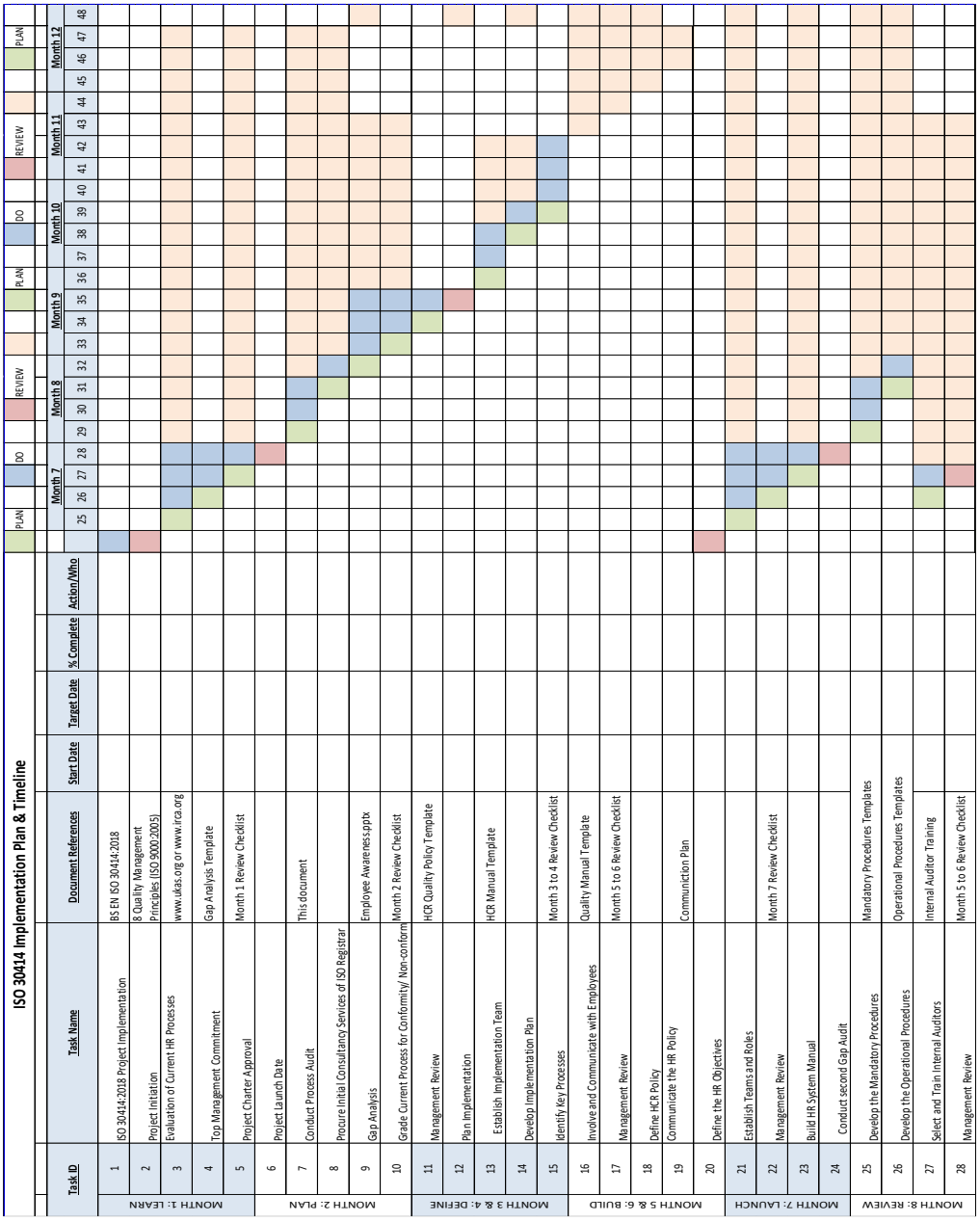
Below is an extract of the Implementation Timeline Checklist for the Project. For the ISO standard, Check is replaced by "Review", which means the same thing. The Plan-Do-Check-Act cycle is spread over all 18.26 months of the project, and is broken down for each activity timeline.

Figure 52: Implementation Timeline Quality Checklist ISO 30414:2018 – Months 1-6 (Tasks 1-28)



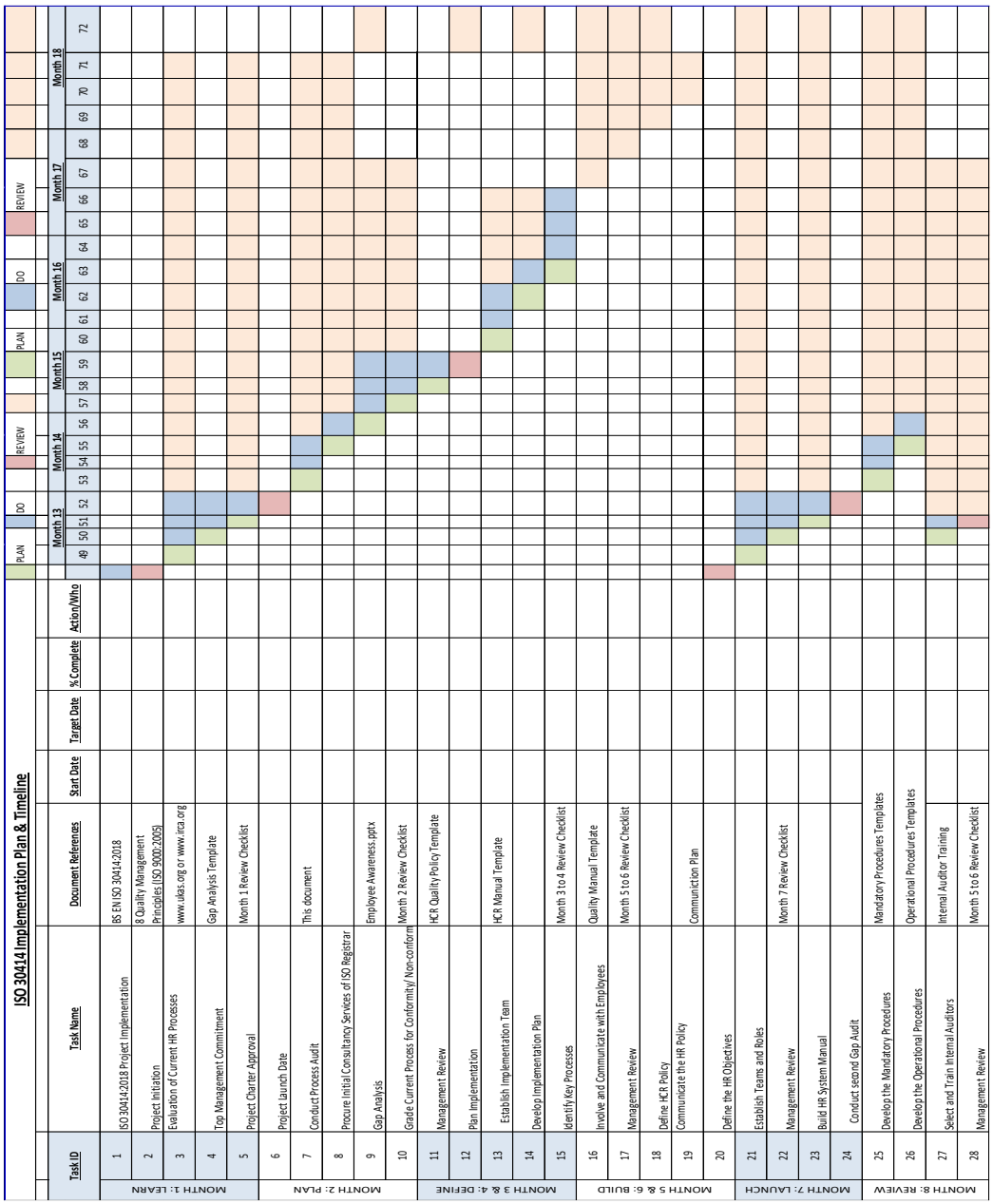
Note: Project Quality Checklist (Own Source)

Figure 53: Implementation Timeline Quality Checklist ISO 30414:2018 – Months 7-12 (Tasks 1-28)



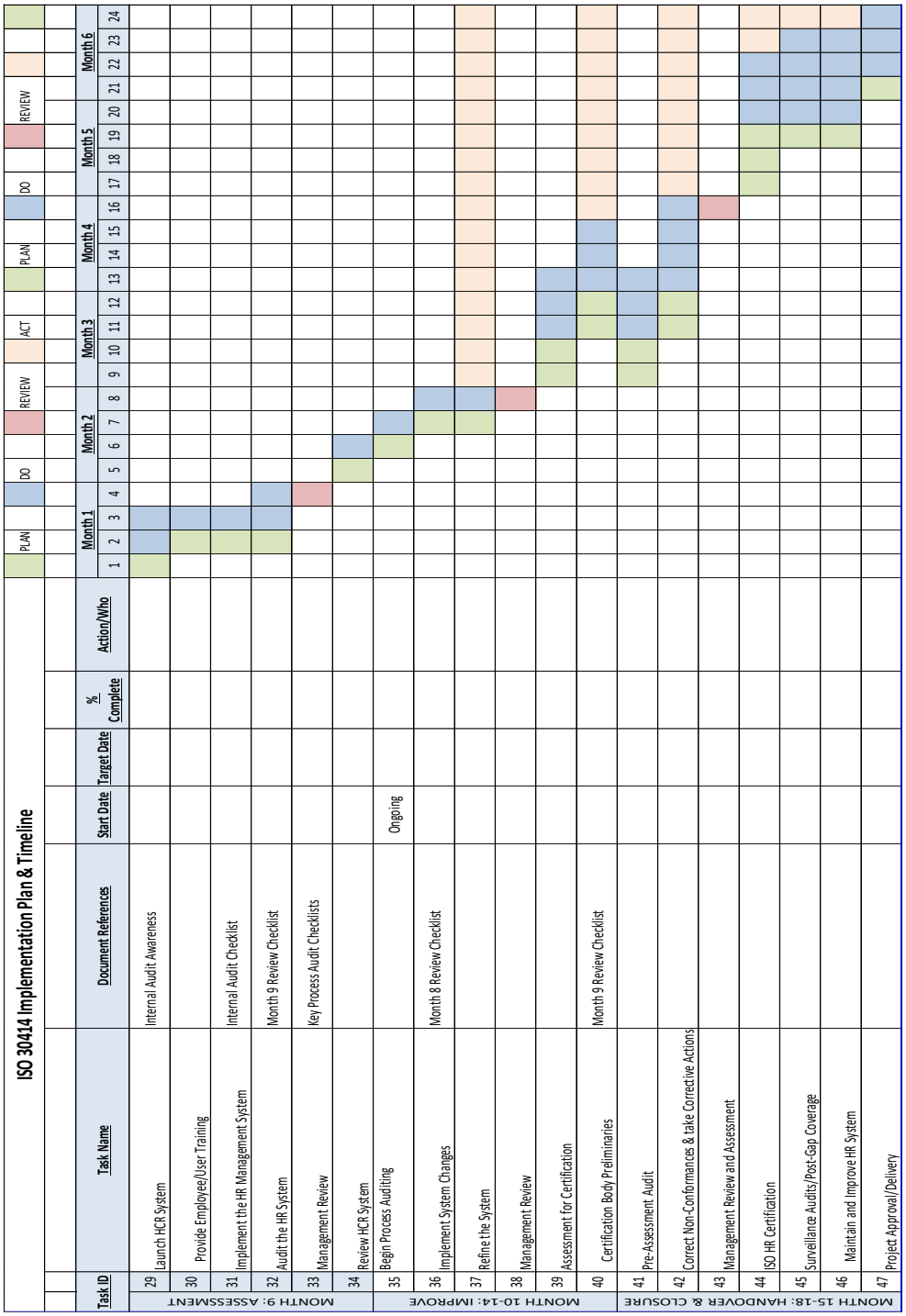
Note: Project Quality Checklist (Own Source)

Figure 54: Implementation Timeline Quality Checklist ISO 30414:2018 – Months 13-19 (Tasks 1-28)



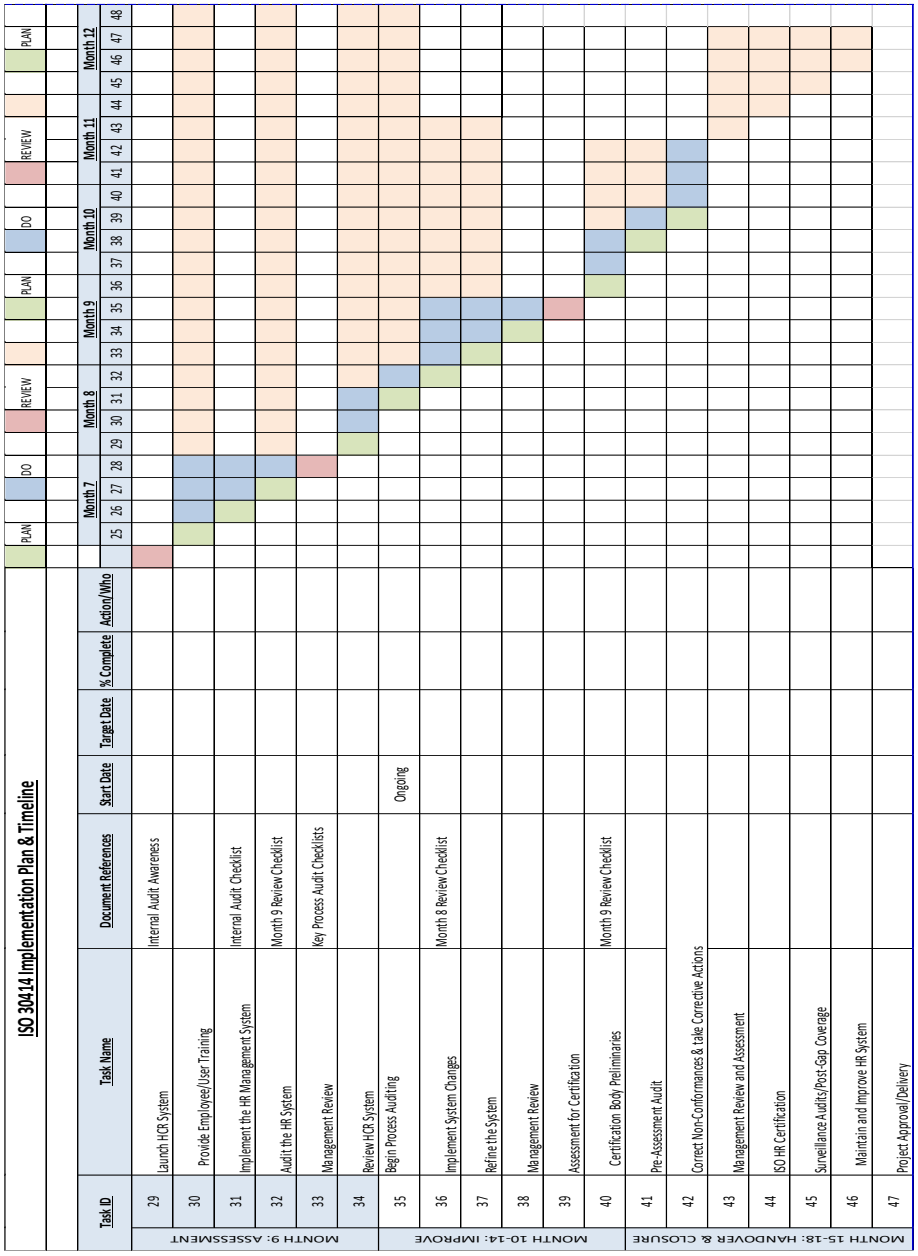
Note: Project Quality Checklist (Own Source)

Figure 55: Implementation Timeline Quality Checklist ISO 30414:2018 - Months 1-6 (Tasks 29-47)



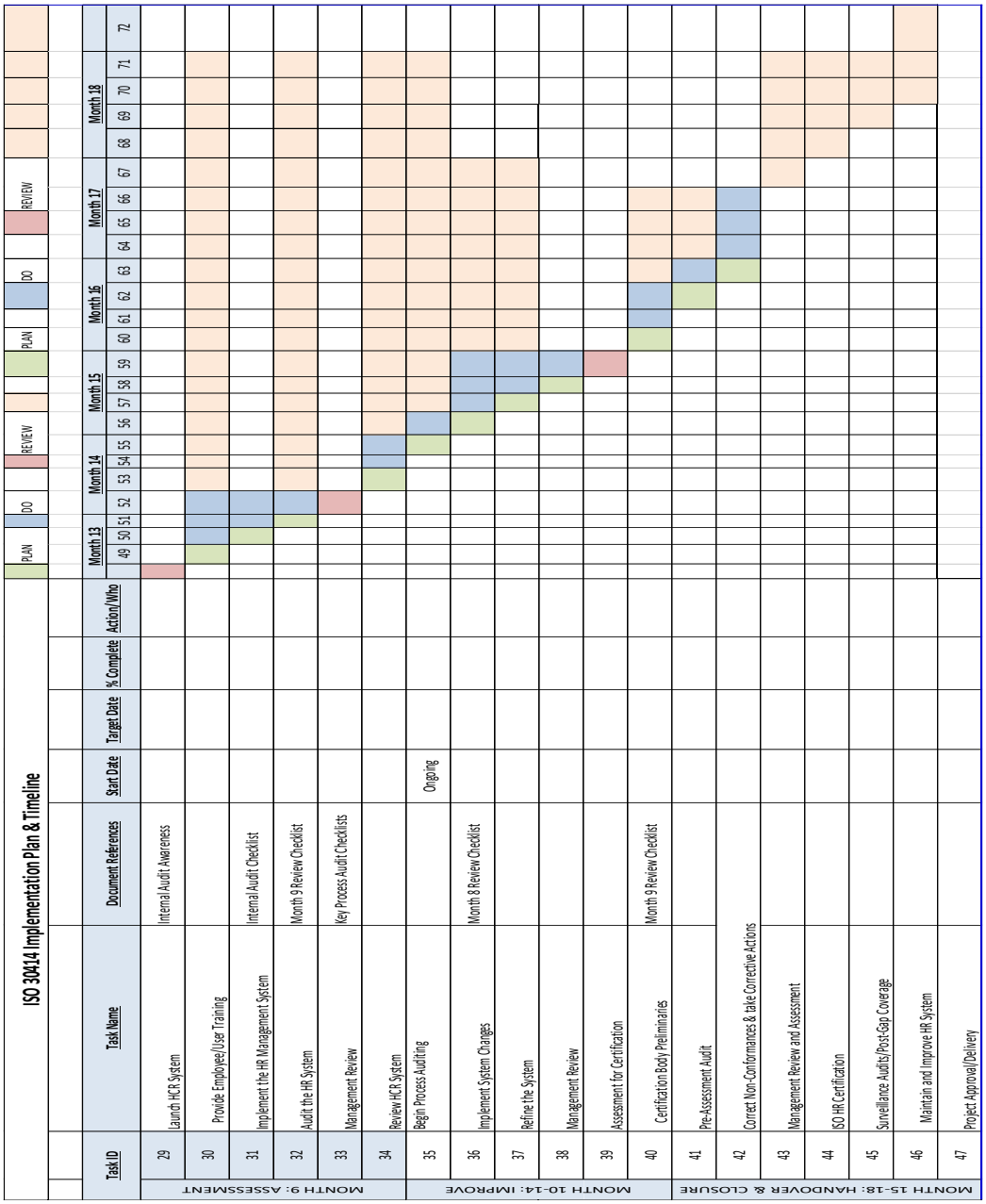
Note: Project Quality Checklist (Own Source)

Figure 56: Implementation Timeline Quality Checklist ISO 30414:2018 Months 7-12 (Tasks 29-47)



Note: Project Quality Checklist (Own Source)

Figure 57: Implementation Timeline Quality Checklist ISO 30414:2018 Months 13-19 (Tasks 29-47)



Note: Project Quality Checklist (Own Source)

L-Shaped Matrix

Finally, the L-shaped prioritization matrix will be used to rank the prioritization of customer requirements for the project, thus helping to manage and control the quality output for the project.

Figure 58: L-Shaped Prioritizatiom Matrix

ISO PROJECT CUSTOMER-WEIGHTED REQUIREMENTS PRIORITIZATION

Customer-weighted Requirements Prioritization	Ministry of Industry, Investment & Commerce	Project Manager	Manufacturing Companies	Manufacturing Employees	ISO Consultant	HR Consultant	Other Industries	Project Team	Customers	Suppliers	Regulators	Row Total	Relative Decimal Value	KEY	
Functional Integration		0.10	10.00	0.10	0.20	1.00	1.00	5.00	1.00	10.00	10.00	38.40	8.17	10	Much more
Project Completion	0.10		10.00	10.00	10.00	1.00	1.00	10.00	0.20	10.00	10.00	62.30	13.26	5	More
Accessibility	0.10	0.20		0.10	0.10	0.10	1.00	1.00	0.10	0.10	0.10	2.90	0.62	1	Equally
Usability	0.20	0.20	10.00		1.00	0.10	0.20	5.00	0.20	1.00	1.00	18.90	4.02	1/5	Less
Affordability	1.00	10.00	10.00	5.00		5.00	5.00	10.00	5.00	10.00	10.00	71.00	15.11	1/10	Much Less
Profitability	5.00	5.00	10.00	10.00	1.00		5.00	10.00	1.00	10.00	10.00	**67.00**	14.26		
ISO Compliant	0.10	0.10	1.00	0.10	0.10	0.20		0.20	0.20	1.00	1.00	4.00	0.85		
Regulatory Compliant	0.10	0.10	1.00	0.10	0.10	0.10	0.10		0.10	0.10	0.10	1.90	0.40		
Budget Compliant	10.00	10.00	10.00	10.00	10.00	1.00	1.00	10.00		10.00	10.00	**82.00**	17.45		
Regenerative & Sustainability Compliant	0.10	0.10	0.10	1.00	0.10	0.10	0.10	0.10	0.10		1.00	2.80	0.60		
Corporate Social Responsibility	0.10	0.10	0.10	1.00	0.10	0.10	0.10	0.10	0.10	1.00		2.80	0.60		
Customer Friendly	0.10	0.10	1.00	1.00	0.10	0.10	0.10	0.10	0.10	1.00	1.00	4.70	1.00		

Note: Customer-weighted Prioritization, Own Source

4.7. Project Resource Management Plan

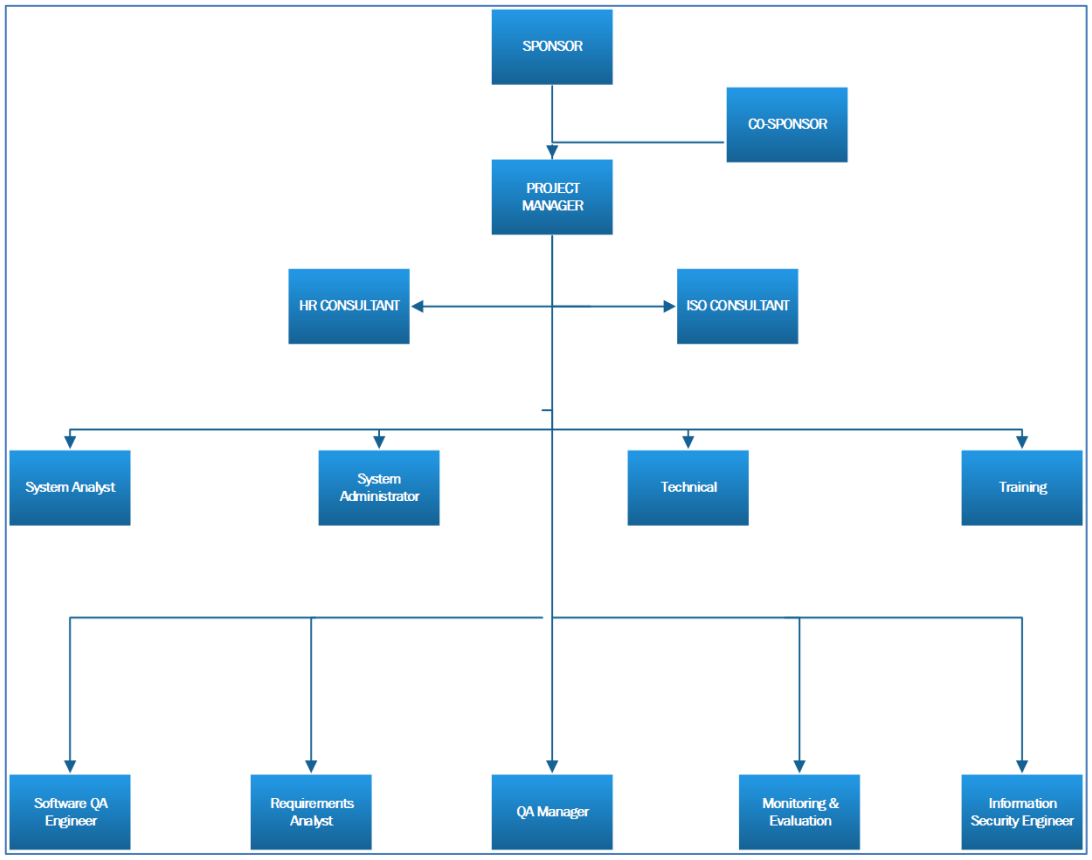
The Resource Management Plan will be used throughout the duration of this project to aid in the management of this project's human resource activities throughout the project until closure. The Resource Management Plan includes planning for human and technical resource, estimating the resource that each activity will require, acquiring the necessary resources, developing the team, managing how the team operates, and controlling the resources to ensure that all the assigned physical resources are available as planned.

In planning for resource management, the stakeholder register, risk register, the project schedule and the requirements documentation are used as inputs. The emerging plan will therefore express project roles and responsibilities, reporting relationships, how resource will be hired, managed and released during the project.

An organizational chart will be used to show the roles and reporting relationships within the project.

ISO Project Organization Chart

Figure 59: ISO Project Organization Chart



Note: Project Org Chart, created by Microsoft Visio

Team Roles, Competency and Authority

Functional competencies are defined by duties and responsibilities assumed by the project team. Each competency establishes the benchmark against which the team are assessed.

Figure 60: Team Roles, Competencies and Authority

Team Roles, Competencies and Authority				
Name	**Role**	**Responsibilities**	**Competency Grade**	**Authority**
Kerreen Wilson	**Project Manager**	Develop, monitor, and review project management deliverables and activities within the project plan Communicate to and receive feedback from the project team Escalate and resolve issues as needed Initiate project meetings in consultation with project team and sponsor Develop project and implementation plans Prepare deliverables for approval by stakeholders Schedule and track resource Communicate project status to Project Sponsors and stakeholders	Over 15 years experience in leading projects within the Manufacturing Industry Over 10 years exoerience in leading ISO projects	Responsible for human, technical and financial resources Oversees delivery of results
Fritz Hanchard	**Sponsor**	Oversee high-level project progress Provide input to and approval of the project charter Provide and approve project budget and resources. Approve any project change requests Champions the project to provide exposure and buy-in from senior management. Approve the project completionAuthorizes Project. Approves final	Experience in financing complex projects projects	Authorizes project charter Participate in kick-off meetings Participate in post-project evaluation and acceptance
Vincent Guthrey	**Co-Sponsor**	Assist the project manager in providing leadership for and managing the team's performance of project activities Acts as a "champion" for the project, in partnership with the project sponsor.	Experience in executing/supervising complex projects projects	Responsible for creating an enabling environment and takes decisions impacting the entire
Margaret Elizer	**HR Consultant**	Works with Project Manager in the research and execution phases of a project and should involve them in the technical validation of project charters and plans	Over 10 years' experience in Data Science, HR Analytics	No direct supervisory responsibility Help to coordinate human resources
Rinstandt Harlet	**ISO Consultant**	The Subject Matter Expert is that individual who has a high level of expertise in performing a specialized job, task, or skill within the organization. Project Managers need to work with SMEs in the research and execution phases of a project and should involve them in the technical validation of project charters and plans	Over 5 years experience in implementing ISO standards in the HR Industry. Over 15 years experience in data reporting, research,perspective planning simulation, analytic s and CI withinHR. Over 10 years experience in HR	No direct supervisory responsibility Help to coordinate human resources
Project Team	**Project Team**	The Project Team has responsibility for conducting project activities. Project Team members, as necessary, assist the Project Manager in planning the development effort and help construct commitments to complete the project within established schedule and budget constraints. The Project Team may include the subject matter experts responsible for implementing the project solution. Customers and/or Stakeholders should interact with the Project Team to ensure that requirements are properly understood and implemented. The Project Team may include both UMass Boston staff members and external Consultants brought on for the project engagement.	Trained and knowledgeable in projects and functional area	Without supervisory responsibility, who is accountable for his/her individual performance and contribution to the outputs of the team
Other Stakeholders	**Other Stakeholders**	Stakeholders are persons or organizations that are actively involved in the project, or whose interests may be positively or negatively impacted by the project, or who might exert influence over the project.	Relevant experience to area of contribution	Participate according to stakeholder classification

Note: Team Competency Chart (Own source)

RACI Matrix

In addition to the competency framework, the responsibility assignment matrix or RACI matrix will show the various resources assigned to work packages. RACI stands for Responsible, Accountable, Consulted and Informed, which shows the responsibility that each stakeholder bears.

Figure 61: RACI Matrix

Project Title: Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow Compliance with ISO 30414:2018											
WBS I.D	Team Activities/Deliverables	Project Manager	Project Sponsor	Co-Sponsor	HR Consultant	ISO Consultant	Project IT Team	PMO	External Auditor	External Assessor	Internal Audit Team
0	ISO 30414:2018 Project Implementation	RA	C	C	R	R	R	R	I	I	R
1	Project Initiation	A	C	C	C	C	R	R	I	I	R
1.1	Evaluation of Current HR Processes	A	I	I	R	R	R	R	I	I	I
1.2	Top Management Commitment	A	A	A	C	C	I	R	I	I	I
1.3	Project Charter Approval	A	A	A	I	I	I	A	I	I	I
1.4	Project Launch Date	A	A	A	I	I	I	I	I	I	I
1.5	Conduct Process Audit	A	I	I	R	R	R	R	I	I	R
1.6	Procure Initial Consultancy Services of ISO Registrar	A,R	C	C	I	I	I	R	I	I	I
1.7	Gap Analysis	A	I	I	R	R	R	R	I	I	R
1.8	Grade Current Process for Conformity/ Non-conformity	A	I	I	R	R	R	R	I	I	I
1.9	Management Review	A	A	A	I	I	I	I	I	I	I
2	Plan Implementation	R, A	I	I	I	I	R	R	I	I	I
2.1	Establish Implementation Team	R, A	I	I	I	I	R	R	I	I	I
2.2	Develop Implementation Plan	R, A	I	I	C	C	R	R	I	I	I
2.3	Identify Key Processes	R, A	I	I	C	I	I	I	I	I	I
2.4	Involve and Communicate with Employees	A	I	I		I	R	I	I	I	I
2.5	Management Review	A	A	A	I	I	I	I	I	I	I
3	Define HCR Policy	A	I	I	C	C	R	R	I	I	I
3.1	Communicate the HR Policy	R, A	I	I	C	C	R	R	I	I	I
3.2	Define the HR Objectives	R, A	I	I	C	C	R	R	I	I	I
3.3	Establish Teams and Roles	R, A	I	I	I	I	R	R	I	I	I
3.4	Management Review	A	A	A	I	I	I	I	I	I	I
4	Build HR System Manual	A	I	I	C	C	R	R	I	I	I
4.1	Conduct second Gap Audit	A	I	I	R	R	R	R	I	I	R
4.2	Develop the Mandatory Procedures	A	I	I	C	C	R	R	I	I	I

Note: RACI Matrix (own source)

Figure 62: RACI Matrix cont'd

Project Title: Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow Compliance with ISO 30414:2018											
WBS I.D.	Team Activities/Deliverables	Project Manager	Project Sponsor	Co-Sponsor	HR Consultant	ISO Consultant	Project IT Team	PMO	External Auditor	External Assessor	Internal Audit Team
4.3	Develop the Operational Procedures	A	I	I	C	C	R	R	I	I	I
4.4	Select and Train Internal Auditors	R, A	I	I	C	C	I	R	I	I	I
4.5	Management Review	A	A	A	I	I	I	I	I	I	I
5	Launch HCR System	R, A	C	C	C	C	R	R	I	I	I
5.1	Provide Employee/User Training	R, A	I	I	C	C	R	R	I	I	I
5.2	Implement the HR Management System	R, A	C	C	C	C	R	R	I	I	I
5.3	Audit the HR System	A	I	I	R	R	R	R	I	I	R
5.4	Management Review	A	A	A	I	I	I	I	I	I	I
6	Review HCR System	R, A	C	C	R, C	R, C	R	R	I	I	R
6.1	Begin Process Auditing	R, A	I	I	C	C	R	R	I	I	R
6.2	Implement System Changes	R, A	C	C	C	C	R, A	R	I	I	I
6.3	Refine the System	R, A	C	C	C	C	R, A	R	I	I	I
6.4	Management Review	A	A	A	I	I	I	I	I	I	I
7	Assessment for Certification	R, A	C	C	C	C	R	R	R	R	R
7.1	Certification Body Preliminaries	R, A	C	C	C	C	R	R	R	R	R
7.2	Pre-Assessment Audit	A	I	I	R	R	R	R	I	I	R
7.3	Correct Non-Conformances & take Corrective Actions	R, A	I	I	C	C	R	R	I	I	I
7.4	Management Review and Assessment	A	A	A	I	I	I	I	I	I	I
8	ISO HR Certification	R, A	C	C	C	C	R	R	R	R	R
8.1	Surveillance Audits/Post-Gap Coverage	A	I	I	R	R	R	R	I	I	R
9	Maintain and Improve HR System	R, A	C	C	C	C	R, A	R	R	R	R, A
10	Project Approval/Delivery	R, A	R, A	R, A	I	I	R	R	C	C	R

Note: RACI Matrix (own source)

Team Charter

After developing the organizational chart, the Project Manager and team will develop the Team Charter, which clearly defines the roles of the Project Manager, sponsor and team

members'. The Team Charter documents how the team will function, how matters are escalated, and how they communicate with each other.

Figure 63: Project Team Charter

TEAM CHARTER						
How roles are assigned:	Team decision making	When will the team meet?	Who will call the meetings, coordinate the schedule and publish minutes?	How will the team handle redirection or changes?	What process will the team use for conflict resolution?	How will the team report progress?
Roles are assigned through collaborative discussions, where the aim is to assess each team member and identify each person's area of expertise	If the Project Manager recognizes that a decision is required, a team meeting will be called. The issue will be raised at the meeting and the project manager gives a rationale for the decision.	The team will meet at least twice per week or more frequently as the need arises.	The team member responsible for communications will handle the scheduling.	The team will handle redirection or changes by discussing any issues observed with the project that may require a change in project scope . This can be facilitated via an email, phone call, video conference or face to face meeting.	A meeting will be called to determine or clarify what the issues are. During this process, each party involved in the conflict will make his/her case. The project manager (or an elected person from the team) will preside over the process so that there can be an agreement on what the conflict is.	The team will maintain a progress report for each phase of the project, and update team members at every meeting.
Assignments change when the team decides that someone else is better suited for a particular role	If a member of the project team recognizes an issue where a decision is to be made, he or she will communicate this to the project manager, who calls a meeting to discuss the matter and seek to arrive at a decision.	Team meetings will be a combination of conference call, video call and in person.	The team member responsible for communications will record and publish the meeting minutes to all the team members, after perusal and approval from the project manager.	Once the team is apprised of the issues and a solution is determined, this will be documented in a project document and circulated to all team members.	The person who presides over the process will seek to establish a common goal or outcome for both parties.	The team will establish and maintain a milestone record which will be updated and circulated to all its members.
There are special skills identified in communication, presentation, risk analysis, project management and also subject matter experts	In all instances, a consensus will be made except for instances where an immediate decision must be made by the project manager, and a meeting is not conducive to the decision making process.	Any team member can suggest a meeting, then communicate his/her suggestion to the project manager, who will in turn call a meeting.	The project sponsor may initiate the Meeting	Any new conflict resolution procedure is documented and circulated to the team.	Both parties along with the presiding person will discuss the problems that would have led to the conflict, and agree on a suitable solution, and implement measures to avoid further conflicts.	The team will establish and maintain a milestone record which will be updated and circulated to all its members

Note: Project Team Charter, Own Source

Estimate Activity Resources

This process involves determining how many resources, both technical and human that will be required to complete each activity. Bottom-up estimating is used to estimate activities, along with expert judgment from subject matter experts. The availability of each resource and their costs are used in developing the Resource Breakdown Structure (RBS) for the project.

Figure 64: Resource Usage

Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow Compliance with ISO 30414:2018				
Resource Usage				
Resource Name	**Type**	**Unit**	**Std. Rate**	**Cost/Use**
Group: Human Resource				
Project Manager	Work	1	$138.90/hr	$50,000.00
ISO Consultant	Work	1	$340.00/hr	$30,000.00
HR Consultant	Work	1	$125.00/hr	$20,000.00
JMEA	Work	1	$2,500.00/hr	$7,500.00
Project Team	Work	8	$1,250/mth	$10,000.00
MIIC	Work	1	$0.00/hr	$7,500.00
Group: Human Resource				**$125,000.00**
Group: Technical Resource				
Data Reporting Software	Material	1	$15,000.00	$15,000.00
Laptops	Material	10	$1,000.00	$10,000.00
Internet	Material	80Mbps	$62.50	$5,000.00
Group: Technical Resource				**$30,000.00**
Cost Estimate				**$155,000.00**
Contingency Reserve (10%)				$15,500.00
Management Reserve (5%)				$7,750.00
Resource Costs (Project Budget)				**$178,250.00**

Note: Project Team Resource Usage, Own Source

Resource Acquisition

The project team will be selected based on the project's and industry competency framework. Competencies are widely used across the HR industry and are embedded in all human resources management functions, such as planning, recruitment, performance management and staff development. They are determined by the occupational roles and responsibilities, and the complexity of duties outlined in job descriptions.

Team Development

Team development is continuous throughout the project, and the project manager will ensure that the team members have the requisite skills to perform their roles. Individual and team assessments will measure job execution against specific work plan objectives. In areas where training is necessary, the training plans administered by the PMO will be used to assess whether training is required. The team will also develop through rewards and recognition programmes which will celebrate those members who do good work.

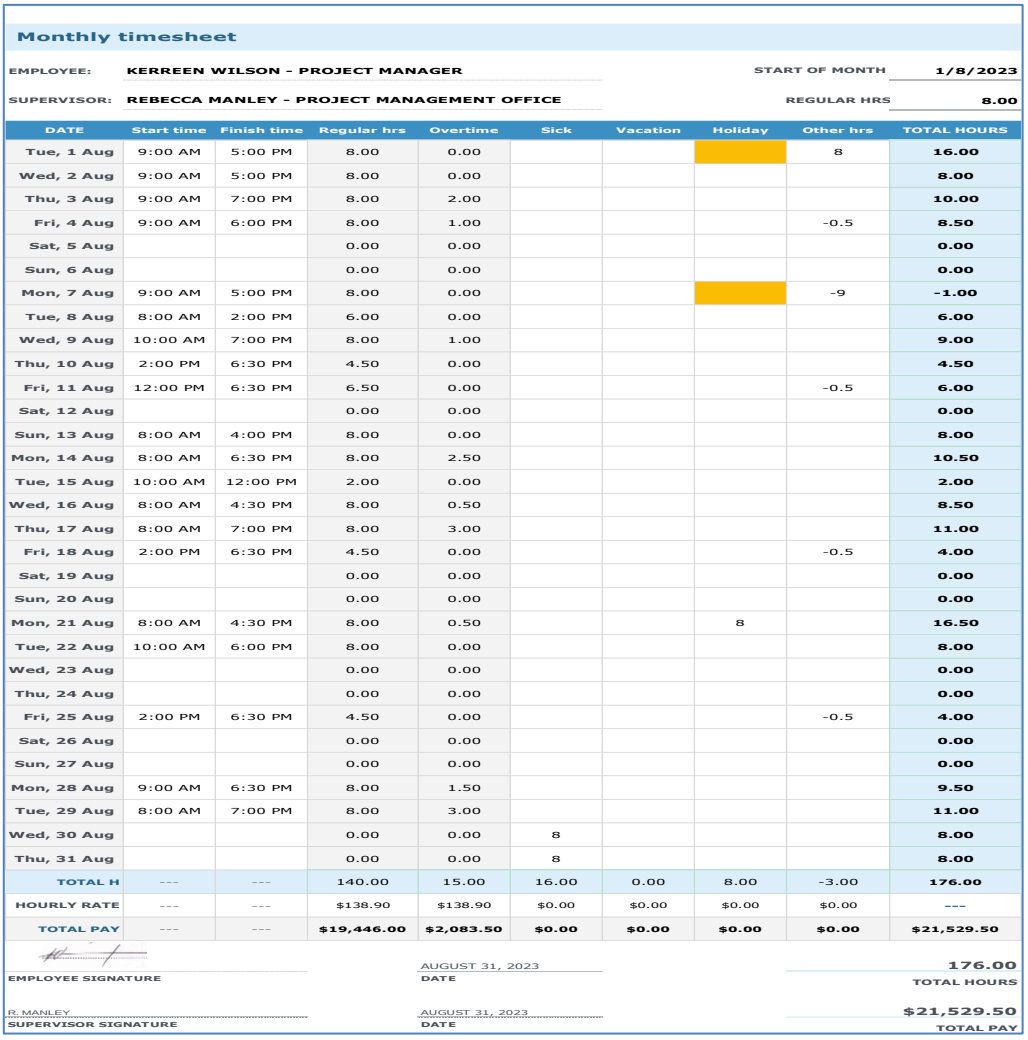
Team Management

The project manager will use interpersonal skills to manage the team, and to deal with conflict. The team charter also shows how conflicts are resolved on the project. Where staffing changes are required, the change requests will be made through the integrated change control process.

Resource Control

Controlling resources takes into consideration how to correctly manage the physical resources on the project. The project manager along with the quality assurance member, will review planned usage of the resource utilizing the Gantt chart in Microsoft projects software, Timesheets, and workload charts to observe whether any replacement, or better management is required. A sample timesheet is shown below for the Project Manager for the month of August 2023.

Figure 65: Sample Timesheet for Project Manager



Monthly timesheet

EMPLOYEE: KERREEN WILSON - PROJECT MANAGER — START OF MONTH: 1/8/2023

SUPERVISOR: REBECCA MANLEY - PROJECT MANAGEMENT OFFICE — REGULAR HRS: 8.00

DATE	Start time	Finish time	Regular hrs	Overtime	Sick	Vacation	Holiday	Other hrs	TOTAL HOURS
Tue, 1 Aug	9:00 AM	5:00 PM	8.00	0.00				8	16.00
Wed, 2 Aug	9:00 AM	5:00 PM	8.00	0.00					8.00
Thu, 3 Aug	9:00 AM	7:00 PM	8.00	2.00					10.00
Fri, 4 Aug	9:00 AM	6:00 PM	8.00	1.00				-0.5	8.50
Sat, 5 Aug			0.00	0.00					0.00
Sun, 6 Aug			0.00	0.00					0.00
Mon, 7 Aug	9:00 AM	5:00 PM	8.00	0.00				-9	-1.00
Tue, 8 Aug	8:00 AM	2:00 PM	6.00	0.00					6.00
Wed, 9 Aug	10:00 AM	7:00 PM	8.00	1.00					9.00
Thu, 10 Aug	2:00 PM	6:30 PM	4.50	0.00					4.50
Fri, 11 Aug	12:00 PM	6:30 PM	6.50	0.00				-0.5	6.00
Sat, 12 Aug			0.00	0.00					0.00
Sun, 13 Aug	8:00 AM	4:00 PM	8.00	0.00					8.00
Mon, 14 Aug	8:00 AM	6:30 PM	8.00	2.50					10.50
Tue, 15 Aug	10:00 AM	12:00 PM	2.00	0.00					2.00
Wed, 16 Aug	8:00 AM	4:30 PM	8.00	0.50					8.50
Thu, 17 Aug	8:00 AM	7:00 PM	8.00	3.00					11.00
Fri, 18 Aug	2:00 PM	6:30 PM	4.50	0.00				-0.5	4.00
Sat, 19 Aug			0.00	0.00					0.00
Sun, 20 Aug			0.00	0.00					0.00
Mon, 21 Aug	8:00 AM	4:30 PM	8.00	0.50			8		16.50
Tue, 22 Aug	10:00 AM	6:00 PM	8.00	0.00					8.00
Wed, 23 Aug			0.00	0.00					0.00
Thu, 24 Aug			0.00	0.00					0.00
Fri, 25 Aug	2:00 PM	6:30 PM	4.50	0.00				-0.5	4.00
Sat, 26 Aug			0.00	0.00					0.00
Sun, 27 Aug			0.00	0.00					0.00
Mon, 28 Aug	9:00 AM	6:30 PM	8.00	1.50					9.50
Tue, 29 Aug	8:00 AM	7:00 PM	8.00	3.00					11.00
Wed, 30 Aug			0.00	0.00	8				8.00
Thu, 31 Aug			0.00	0.00	8				8.00
TOTAL H	---	---	140.00	15.00	16.00	0.00	8.00	-3.00	176.00
HOURLY RATE	---	---	$138.90	$138.90	$0.00	$0.00	$0.00	$0.00	---
TOTAL PAY	---	---	$19,446.00	$2,083.50	$0.00	$0.00	$0.00	$0.00	$21,529.50

EMPLOYEE SIGNATURE — AUGUST 31, 2023 DATE — 176.00 TOTAL HOURS

R. MANLEY SUPERVISOR SIGNATURE — AUGUST 31, 2023 DATE — $21,529.50 TOTAL PAY

Note: Timesheet for Project Manager (Adapted from myhours.com)

4.8. Project Communications Management Plan

This process analyzes the communication requirements of the stakeholders and documents how the project will meet those requirements. The communication matrix identifies all project stakeholders, communications planning activities, the appropriate level of communication for each project stakeholder, what information should be distributed and the frequency of communication. This matrix includes the vehicles of communication such

as: electronic, email, face to face meetings, etc. All feedback will be maintained by the Project Manager in the project's stakeholder register. All communication activities will occur in accordance with the frequencies detailed in the communications planning matrix in order to ensure the project adheres to schedule constraints, as any deviation of these timelines may result in excessive costs or schedule delays, and must be approved by the project sponsor.

Figure 66: Communication Requirements Analysis

Communication Requirements		Communications Planning				
Stakeholder	**Role**	**What?**	**Who?**	**When?**	**How?**	**Response**
Internal Stakeholders						
Pro Management Limited	**Project Manager**	Project Charter	Kerreen Wilson	Project Initiation	Hard Copy	Review and Approve
		Project Scope		Project Kick-off	Hard Copy, Meeting	
		Project Schedule				
		Detailed Budget				
		Detailed Balanced Sheets		Monthly		Review Project Financials
		Change Requests		During Project Execution	Electronic	Review, Action
Ministry of Industry, Investment & Commerce (MIIC)	**Project Sponsor Project Financial Oversight**	Project Charter	Fitz Hanchard	Project Initiation	Hard Copy	Review and Approve
		Project Scope	Kerreen Wilson	Project Kick-off	Hard Copy, Meeting	
		Project Schedule				
		Detailed Budget				
		Detailed Balanced Sheets		Monthly		Review Project Financials
		Change Requests		During Project Execution	Electronic	Review, Action
JMEA	**Co-Sponsor**	Project Charter	Vincent Guthrey	Project Initiation	Hard Copy	Review and Approve
		Project Scope	Kerreen Wilson	Project Kick-off	Hard Copy, Meeting	
		Project Schedule				
		Detailed Budget				
		Detailed Balanced Sheets		Monthly		
		Change Requests		During Project Execution	Electronic	Review, Action
ISO Consultants & More	**ISO Consultant Oversight on ISO Implementation**	Tender Documents	Rinstandt Harlet	When Invitation to Tender is published	Electronic, Hard copy	Review
		Procurement Contracts	Kerreen Wilson	After Contract signing	Electronic, Hard copy	Review and Approve
		Progress Reports		Monthly	Electronic	
		Project Close out Report		One month afrer project ends	Electronic, Hard copy	
		Audit Performance Report				
Labour & Social Security Alliance	**HR Consultant**	Tender Documents	Margaret Elizer	When Invitation to Tender is published	Electronic, Hard copy	Review
		Procurement Contracts	Kerreen Wilson	After Contract signing	Electronic, Hard copy	Review and Approve
		Progress Reports		Monthly	Electronic	
		Project Close out Report		One month after project ends	Electronic, Hard copy	Review and Approve
		Policy documentation				

Note: Communication Requirements Analysis (Own Work)

Figure 67: Communication Requirements Analysis (Cont'd)

Communication Requirements		Communications Planning				
Stakeholder	**Role**	**What?**	**Who?**	**When?**	**How?**	**Response**
Internal Stakeholders						
Project IT Team	**Project IT Team**	Activity Reports Progress Reports	Kerreen Wilson IT Team	Electronic, Circulars Newsletters, Memo		
PMO	**PMO**	Project Charter Project Scope Project Schedule Detailed Budget Detailed Balanced Sheets Change Requests	PMO Kerreen Wilson	Project Initiation Project Kick-off Monthly During Project Execution	Electronic, Memo Email	Review and circulate
Maximal ISO	**Certification Body External Auditor Perform Certification Audit**	Activity Reports Progress Reports	Ernesto Hyman Kerreen Wilson	After each Activity Quarterly	Electronic, Circulars Newsletters, Memo	Review and Advise
Auditors & Consultants LLC	**External Assessor Verify policies and procedures are documened according to standard**	Activity Reports Progress Reports	Rickford Honour Kerreen Wilson	After each Activity Quarterly	Electronic, Circulars Newsletters, Memo	Review and make Recommendation
Internal Audit Team	**Internal Audit Team Identify compliance concerns, risks, fraud and data inaccuracies**	Activity Reports Progress Reports	Ernesto Hyman Kerreen Wilson	After each Activity Quarterly	Electronic, Circulars Newsletters, Memo	Review and give Feedback Make recommendation
Project Team	**Project Team**	Project Charter Project Scope Project Schedule Detailed Budget Detailed Balanced Sheets Change Requests	Project Team Kerreen Wilson	Project Initiation Project Kick-off Monthly During Project Execution	Electronic, Memo Email	Review and circulate
Bureau of Standards, Jamaica	**President/ ISO Assessor Ensures compliance with Certification Regulations**	Project Charter Quality Policy	John Hamilton Kerreen Wilson	Project Initiation During Project Execution	Hard copy Hard copy	Make recommendation Review and Circulate

Note: Communication Requirements Analysis (Own Work)

Figure 68: Communication Requirements Analysis (Cont'd)

Communication Requirements		Communications Planning				
Stakeholder	**Role**	**What?**	**Who?**	**When?**	**How?**	**Response**
External Stakeholders						
Employees	**Manufacturing Industry Employees**	Activity Reports Progress Reports Minutes from Steering Committee Meetings	Kerreen Wilson	Quarterly Quarterly Bi-weekly	Electronic, Circulars Newsletters, Memo	Monitor and review issues, action-items and provide updates where
Other Industries	Other Jamaican Business Assciations curious/ can be affected by HR reporting policy	Documentation from current project	Kerreen Wilson	Project Initiation Quarterly	Electronic, Hard Copy	Mutual Agreements, Recommendations

Note: Communication Requirements Analysis (Own Work)

Communication Management

In addition to the stakeholder management plan, the communication and resource management plan documents how communication will take place.

The project team will employ effective communications methods that are necessary for the project success. The methods of communication that will be utilized by the project team are interactive, push and pull communications. These will be done in the following form of communication with the agreed guidelines.

Figure 69: Communication Methods

COMMUNICATION MANAGEMENT - METHODS OF COMMUNICATION			
MEETINGS	**ELECTRONIC EMAILS**	**WRITTEN/ HARD COPY**	**INFORMAL COMMUNICATION**
In an effort to have successful and productive meetings, the team members will adhere to the following guidelines: The meeting agenda will be distributed no later than two (2) business days before the meeting. Meeting minutes to include all action items and responsibilities will be distributed within two (2) business days following the meeting. Meetings will start with a review of the status of all action items from previous meetings and end with a review of all new action items resulting from the meeting. The review of the new action items will include identifying the owner for each action item along with the deadlines for each item. All cellular phones and other electronic devices will either be placed on vibrate or switched to silent mode during meetings. Participants wishing to leave the meeting will so inform the Project Manager prior to leaving. Distribution of meeting agenda and minutes and facilitation of the meeting will be the responsibility of the coordinator. The Communications Manager is responsible for documenting the status of all meeting items and must be on time for all meetings. The Time Keeper is responsible for helping the Project Manager adhere to the time limits set in the meeting agenda.	All electronic communication/emails pertaining to the project should be professional, respectful and provide brief and relevant information. Emails should be distributed to the correct project participants in accordance with the communications matrix. All attachments should be in an identified organization's standard software suite program and adhered to established company formats.	Written communication shall be: • concise • clearly written • thorough • accurate • coherent • consistent • polite	While informal communication is a part of every project and is necessary for successful project completion, any issues, concerns, or updates that arise from informal discussions between team members must be communicated to the Project Manager so the appropriate action may be taken

Note: Communication Methods (Own Work)

Monitoring Communication

This process allows the project team to compare how they are actually communicating, versus how they planned to communicate. Change requests are utilized if the project manager or any stakeholder believes that the ways of communication should change.

4.9. Project Risk Management Plan

According to (Project Management Institute, 2017), The objectives of project risk management are to increase the probability and/or impact of positive risks and to decrease the probability and/or impact of negative risks, in order to optimize the chances of project success. For the purposes of this project, the risks are first identified, then the root causes are determined, followed by an assessment of their likelihood and level of impacts, before a cost-effective contingency plan is adopted to control it. This plan, therefore, outlines how risk management activities will be performed, recorded and monitored throughout the lifecycle of the project by the risk management team, and provides templates and practices for recording and prioritizing risks.

Risk Identification

The project team and other relevant stakeholders will identify the risks that can affect the project. Risks are continually analyzed and monitored throughout the project. Risks will be identified by using the Risk Breakdown Structure (RBS) as a checklist. The RBS is a

hierarchical breakdown of the risks identified in the project, grouping them into technical, management, commercial and external risks.

Figure 70: Risk Breakdown Structure

RISK BREAKDOWN STRUCTURE		
RBS LEVEL 0	**RBS LEVEL 1**	**RBS LEVEL 2**
0. ALL SOURCES OF PROJECT RISKS	**1. TECHNICAL RISK**	1.1 Scope Definition 1.2 Requirements definition 1.3 Estimates, assumptions and constraints 1.4 Equipment Failure 1.5 Technical Interfaces 1.6 Design Documentation
	2. MANAGEMENT RISK	2.1 Project Management 2.2 Organization 2.3 Operations Management Resourcing [adequate staffing; skill specifications; training; re-training]
	3. COMMERCIAL RISK	3.1 Contractual terms and conditions 3.2 Internal procurement 3.3 Suppliers and Vendors 3.4 Client/Customer/Workers stability 3.5 Procurement delays [delivery and logistics]
	4. EXTERNAL RISK	4.1 Legislation 4.2 Monetary/Economic [Exchange Rates; Inflationn; Financing] 4.3 Site Facilities 4.4 Regulatory standards 4.5 Natural [infrastructural risks] 4.6 Safety [occupational safety and health standards/ practices and regulations] 4.7 Civil Unrest from workers or job seekers

Note: Risk Breakdown Structure (Own Source)

Risk Register

The risk register identifies the individual project risks, using information from the assumption logs, stakeholder register and issue logs.

Figure 71: Risk Identification

RISK IDENTIFICATION			
No.	**CAUSE**	**RISK**	**CONSEQUENCE**
1	Currency devaluation in the USD$ rate, resulting in the cost of resources costing more than projected.	Inadequate budget	Delay in schedule and increase in costs
2	Procurement of physical resources taking longer than planned	Delay in Project Execution	Delay in schedule Delay in resource acquisition
3	Software license increase in the software market	Change in Market Condition	Delay in schedule Increased sourcing costs
4	5-year schedule review to existing standard due on 2023	Regulatory project requirement	Delay in schedule Increased cost of hiring new workers
5	Scarcity of local ISO and HR consultants, resulting in experts being unavailable during some heavy audit months	Unavailability of key stakeholders	Delay in schedule due to staff replacement Increased cost to hire replacement workers Loss of key staff
6	Failure to successfully complete process audits on time may result in schedule delays	Delay in project delivery	Scope creep Schedule delays
7	Unclear statement of work General terms that calls for minimal or general requirements "as required"	Lack of clarity in project goals Additional work outside of project scope	Scope creep Delay in schedule

Note: Risk Identification (Own Source)

Perform Qualitative Risk Analysis

This process prioritizes the risks listed in the risk register, by determining their impact and probability of occurrence. The key below explains what each results mean.

Chart 31: Impact and Likelihood Scale

Likelihood of Occurrence	Score Assigned	Impact	Score Assigned
Very unlikely	0.1	Very low	0.1
Somewhat unlikely	0.3	Somewhat low	0.3
50-50 possibility	0.5	Moderate	0.5
Somewhat likely	0.7	Somewhat high	0.7
Very likely	0.9	Very high	0.9

Note: Impact and Likelihood scale (Own Source)

The results of the probability matrix are as follows:

Chart 32: Probability and Impact Matrix

PROBABILITY AND IMPACT MATRIX					
RANK	ID	RISK DESCRIPTION	PROBABILITY	IMPACT	RISK SCORE
1	ISO4	5-year schedule review to existing standard due on 2023	0.9	0.9	0.81
2	ISO6	Failure to successfully complete process audits on time may result in schedule delays	0.3	0.9	0.27
3	ISO1	Currency devaluation in the USD$ rate, resulting in the cost of resources costing more than projected.	0.7	0.7	0.49
4	ISO7	Unclear statement of work General terms that calls for minimal or general requirements “as required”	0.9	0.9	0.81
5	ISO3	Software license increase in the software market	0.8	0.9	0.72
6	ISO2	Procurement of physical resources taking longer than planned	0.7	0.9	0.63
7	ISO5	Scarcity of local ISO and HR consultants, resulting in experts being unavailable during some heavy audit months	0.9	0.9	0.81

Note: Probability Matrix (Own Source)

The chart below shows the defined conditions for Impact Scales of a Risk on Major Project Objectives.

Chart 33: Impact Definition

Impact Definition					
Project Objective	Low	Somewhat low	Moderate	Somewhat high	High
	[0.1]	[0.3]	[0.5]	[0.7]	[0.9]
Cost	Cost variance not exceeding 5%	Cost variance of 6%-14%	Cost variance of 15%-25%	Cost variance of 26%-40%	Cost variance exceeding 40%
Schedule	Time variance less than 1% - Over schedule by 2 weeks or less	Time variance of 1%-4% - Over schedule by 2 months or less	Time variance of 5%-10% - Oer schedule by 3 months or less	Time variance of 11%-20% - Over schedule by 4 months or less	Time variance exceeding 20% - Over schedule by 5 months or more
Scope	Scope change barely noticeable - Between 1-2 work packages affected	Minor areas of scope affected - Between 3-5 work packages affected	Major areas of scope affected - Between 6-9 work packages affected	Scope change unacceptable to sponsor - Between 10-15 work packeages affected	Scope change warrants a new project charter - 15 or more work packages affected
Quality	Quality change barely noticeable	Only cosmetic applications are affected	Quality change requires sponsor approval	Quality change unacceptable to sponsor	Project deliverables are unfit or unnecessary for purpose

Note: Impact Definition Scale (Own Work)

Perform Quantitative Risk Analysis

This process provides a numerical analysis of the risks on the project, and is performed only after the risk impact and probability have been identified. The project team will use a PERT analysis on both the probabilities and the potential impact for each risk using the values provided by the SMEs, and the results of the PERT analysis used to compute the risk score (probability of occurrence x degree of impact) for each risk. The risks were then ranked in order of priority based on the risk score, and then added to the risk register.

The risk score was used to outline the category in which a risk falls. It is the probability of the risk occurring, multiplied by the impact of the risk on cost, schedule, scope and quality. Each risk was categorized based on the following risk score scale.

Chart 34: Risk Priority Designation Code

Risk Score	Priority	Key
0.1 to 0.3	Low	
0.31 to 0.5	Medium	
Above 0.5	High	

Note: Risk Priority Designation Code

The results of the prioritization are as follows:

Chart 35: Risk Prioritization Results

		Threats						Opportunities			
Probability	0.9	0.90	0.27	0.45	0.63	0.81	0.81	0.63	0.45	0.27	0.09
	0.7	0.70	0.21	0.35	0.49	0.63	0.63	0.49	0.35	0.21	0.07
	0.5	0.50	0.15	0.25	0.35	0.45	0.45	0.35	0.25	0.15	0.05
	0.3	0.30	0.09	0.15	0.21	0.27	0.27	0.21	0.15	0.09	0.03
	0.1	0.10	0.03	0.05	0.07	0.09	0.09	0.07	0.05	0.03	0.01
		0.10	0.30	0.50	0.70	0.90	0.90	0.70	0.50	0.30	0.10
		Impact (numerical scale) on an objective such as time, cost, scope or quality									

Note: Risk Prioritization Results

Planning Risk Response

For negative risks or threats, the risk strategies are: **Avoid, Transfer, Mitigate, or Accept**. For positive risks or opportunities, the risk strategies are: **Exploit, Share, Enhance, or Accept**. Any risks outside the scope of the project are escalated.

Chart 36: Risk Responses

Code	Cause	Risk Description	Reference	WBS	Probability	Impact	Rank (P x I)	Response	Preventive Actions	Backup	Contingency Plan	Time (days)	Money ($)	Trigger	Responsible	Post-Plan Probability	Post-Plan Impact	Post-Plan Rank
ISO1	Currency devaluation in the USD's rate, resulting in the cost of resources costing more than projected.	Cost for physical and technical resources will increase as the USS devalues.	Start of Project	ISO1	0.9	0.9	0.81	Mitigate risk by pooling some project. process in JMDS	Monitor movements in the exchange rate and order resources at times of market periods.	Utilize other project examples to see how they executed given the same constraints	Obtain contingency to extend schedule and expand budget	0	$ -	Approval from Sponsor and SMEs	Project Manager	0.3	0.9	0.27
ISO2	Procurement of physical resources taking longer than planned	There may be a shortage on SMEs/IT personnel	Start of Project	ISO2	0.3	0.9	0.27	Avoid risk by monitoring procurement and putting in place triggers	Have someone monitor procurement activities, and plan order before resource is required	Utilize other project examples to see how they executed given the same constraints	Obtain contingency to extend schedule and expand budget	0	$ -	Approval from Sponsor and SMEs	Project Manager	0.2	0.9	0.18
ISO3	Software license increase in the software market	Increase in purchase price of software, at the time of procurement, we soon when costs were estimated.	during execution	ISO3	0.7	0.7	0.49	Share risk by utilizing outsourced Payment Contractor	Using fixed-price contracting terms	Utilize other project examples to see how they executed given the same constraints	Obtain contingency to extend schedule and expand budget	0	$ -	Approval from Sponsor and SMEs	Project Manager	0.3	0.9	0.27
ISO4	5-year schedule review to existing standards on 2023	There is an impending review of the ISO 20000 standard, which is slated to take place in 2023	during execution	ISO4	0.9	0.9	0.81	Avoid risk by benchmarking against proposed standards	Start planning according to the standards under review	Utilize other project examples to see how they executed given the same constraints	Obtain contingency to extend schedule and expand budget	0	$ 8,200.00	Approval from Sponsor and SMEs	Project Manager	0.1	0.8	0.08
ISO5	Scarcity of local ISO and HR consultants, resulting in experts being unavailable during some heavy audit months	Local ISO and HR Consultants may not be available in island	Start of Project	ISO5	0.8	0.9	0.72	Have some remote resources who can do online work	Have some remote resources who can do online work	Utilize other project examples to see how they executed given the same constraints	Obtain contingency to extend schedule and expand budget	0	$ -	Approval from Sponsor and SMEs	Project Manager	0.5	0.9	0.45
ISO6	Failure to successfully complete process audits on time may result in schedule delays	if there are too many non-conformances, this will delay a successful project audit, resulting in schedule delays.	during execution	ISO6	0.7	0.9	0.63	Do Audit Planning and respond quickly to non-conformances	Have Internal Auditors proficient in recognizing audit issues.	Utilize other project examples to see how they executed given the same constraints	Obtain contingency to extend schedule and expand budget	0	$ 7,000.00	Approval from Sponsor and SMEs	Project Manager	0.2	0.8	0.16
ISO7	Unclear statement of work -General terms that calls for minimal or general requirements "as required"	Scope of work may be too general, and not specifically related to an IT project.	Start of Project	ISO7	0.9	0.9	0.81	Use communication plan to encourage feedback regarding understanding work scope	Review scope of work statements with assigned resource	Utilize other project examples to see how they executed given the same constraints	Obtain contingency to extend schedule and expand budget	0	$ -	Approval from Sponsor and SMEs	Project Manager	0.3	0.8	0.24
Project General Risk: High							4.54	Total Amount of Contingency Reserves:				0	$15,300.00	Post-Plan Project General Risk: Low			1.65	

Note: Risk Responses (Own Work)

Implement Risk Responses

Once a risk materializes, the project manager will utilize the risk responses that were created during the project.

Monitor Risks

The project manager will examine how the risk responses have been working, and whether they have been applied according to plan. Where any necessary change is required, this will be done through a change request.

4.10. Project Procurement Management Plan

The Procurement Management Plan sets the framework as it relates to procuring goods and services throughout the life this project. It will serve as a guide for managing the procurement process and will be updated as acquisition needs change. This plan identifies and defines the items to be procured, the types of contracts to be used in support of this project, the contract approval process, and decision criteria. The importance of coordinating procurement activities, establishing firm contract deliverables, and metrics in measuring procurement activities is included. The requirements for formal procurement closure are also defined in the terms and contracts of procurement, agreed with suppliers of resources.

The project manager needs to ensure that all the agreements meet the specific needs of the project while adhering to organizational procurement policies.

Procurement Approach

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 to be procured for the successful completion of the project. The procurement unit will review the items to be procured with the project manager and determine whether it is advantageous to make or buy the items. The procurement roles and responsibilities are detailed below.

Chart 37: Procurement Roles and Responsibilities

Role	Responsibility	Authority
Project Manager	Establish Vendor selection criteria Vendor Identification Identify procurement risks Develop statement of work	Request for Quotation (RFQ) Statement of Work (SOW)
Project Sponsor and Co-Sponsor	Approve Vendor selection criteria Approve SOW Review and approve quotation reports Monitor procurement against cost baselines Approve and sign payment checks	Project Budget Project Baselines
Procurement Department/PMO	Prepare and monitor Payroll Cosign Checks Maintain payments for resources Collect and document receipts Maintain all contractual documents	Purchase Agreements
Subject Matter Experts	Participate in selection of resources Help in sourcing standard-ready software	Resource Sourcing

Note: Procurement Roles and Responsibilities (Own Work)

The Procurement schedule and deadline are as follows:

Chart 38: Procurement Schedule and Deadline

Activity	Due Date	Responsible
RFP released to Service providers	30 August 2023	**Project Manager**
Clarification calls with Service providers (as requested)	09 September 2023	**Project Manager**
Service providers return proposal	16 September 2023 12:00 CET	**Project Manager**
Expected evaluation of proposals (including references)	23 September 2023	**Project Manager & SMEs**
Interviews of shortlisted candidates	30 September 2023	**Project Manager**
Expected selection of proposal	**07 October 2023**	**Project Manager & SMEs**

Note: Procurement Schedule and Deadline (Own Source)

Types of Procurement Contracts

All work packages and services to be procured for this project will be solicited under a Time and Materials contract. The project team will work with the Contracts and Purchasing Department to define the work packages, services and required delivery dates. The contractors will then engage with their preferred vendors in order to procure the items within the required time frame, and at a reasonable cost under the Time and Materials contract, once the vendor is selected. These contracts will be thoroughly reviewed and critique by the Water Company legal team before any agreement is made. There will also be considerations made for entering into a Time and Material contract in the event that that need arises for services of any expert/consultant, or outside support when a precise statement of work cannot quickly be prescribed. **A sample procurement contract is detailed in Appendix 5.**

Procurement Strategy

Under the instructions of the Project Manager, the Procurement unit will issue invitations for bid (IFB), Request for Proposal (RFP) and Request for Quotations (RFQ) in order to solicit proposals from vendors. Interested vendors will then respond within thin the given period. This response should include how they will accomplish the job, who will perform the work, vendors' experience in providing these goods and services, customer testimonials, backgrounds and resumes of employees performing the work, and a line-item breakdown of all costs involved. The process for ISO procurement is also governed by ISO guidelines. **A simple Request for Proposal is found in Appendix 5.**

The criteria for the selection and award of procurement contracts under this project will be based on the ability of the vendor to provide all items by the required delivery date; agreed quality; cost-effective resource and past reputation.

Chart 39: Evaluation Criteria

Criteria	**Weight**	**Section #**
Proposal description, including virtual interviews with shortlisted proposers	30%	4.1
Experience with similar studies	20%	4.2
Implementation plan	20%	4.3
Company profile and personnel	20%	4.4
Financial proposal	10%	4.5
Total	100%	

Note: Evaluation Criteria (Own Source)

Control Procurement

The project manager will utilize agreements/contracts, procurement documents and approved change requests to monitor and approve any changes in procurement.

4.11. Project Stakeholder Management

The Stakeholder Management Plan helps ensure that stakeholders are effectively involved in project decisions and execution throughout the lifecycle of the project, to gain support for the project and anticipate resistance, conflict, or competing objectives among the project's stakeholders.

The Stakeholder Management Plan for the project includes the following sections: Identify Stakeholders – identify by name and title the people, groups, and organizations that have significant influence on project direction and its success or who are significantly impacted by the project; Plan Stakeholder Management – identify the strategies and mechanisms that will be used to achieve the greatest support of stakeholders and minimize resistance; Manage Stakeholder Engagement – outlines the processes, communication method and steps that will be undertaken to carry out the planned strategies; and Control Stakeholder Engagement – describes the methods that will be used to monitor stakeholder engagement and alert the project team if problems are surfacing.

Identify Stakeholders

A stakeholder register is created for the project, which details who the stakeholders are that affect or are affected by the project's execution. The stakeholder register will be utilized throughout the project. Stakeholders are identified through expert judgment,

meetings, and documents from previous projects. The stakeholder register contains the name of the stakeholder, the role on the project, their communication requirements, contact information, how they are affected by or their power-influence level on the project. Any updates to the list of stakeholders will be managed by a Change request. The stakeholder register is shown below:

Chart 40: Stakeholder Register

ISO 30414:2018 PROJECT					
STAKEHOLDER REGISTER					
Direct Stakeholders	**Name**	**Position**	**Organization**	**Telephone**	**Email Address**
Sponsor	Fitz Hanchard	Sponsor	Ministry of Industry, Investment & Commerce (MIIC)	1-876-999-2687	fhanchard@miic.gov.jm
Project Manager	Kerreen Wilson	Project Manager	Pro Management Limited	1-876-499-1497	kerreen.wilsona6@gmail.com
ISO Consultant/Registrar	Rinstandt Harlet	ISO Consultant/Registrar	ISO Consultants & More	1-786-236-0012	isocons@isocon.com
Certification Body	Ernesto Hyman	Certification Body	Maximal ISO	1-978-539-2918	maximiso@maxim.com
External ISO Auditor	Rickford Honour	External ISO Auditor	Auditors & Consultants LLC	1-435-309-8365	info@audcon.com
HR Consultant	Margaret Elizer	HR Consultant	Labour & Social Security Alliance		margaret.elizer@lssa.com
JMEA	Vincent Guthrey	Managing Director/Co-Sponsor	Jamaica Manufacturers & Exporters Association	1-876-967-8763	vguthrey@jmea.gov.jm
Bureau of Standards,	John Hamilton	President/ ISO Assessor	Bureau of Standards, Jamaica	1-876-861-9824	johnh@bsj.gov.jm
Project Team	Project Team	Project Team	Pro Management Limited		
Indirect Stakeholders	**Name**	**Position**	**Organization**		
Employees	Manufacturing	Manufacturing Industry	Manufacturing Industry Employees		
Other Industries	Other Jamaican	Other Jamaican Business	Other Jamaican Business Assciations		

Note: Stakeholder Register (Own Work)

Plan Stakeholder Management

This process is where the methods needed to keep stakeholders engaged. Keeping stakeholders engaged is important so that their expectations are met. The project manager uses expert judgment, data gathering and analysis, to come up with the methods that will keep the stakeholders properly engaged. The stakeholder matrix categorizes the stakeholders, and helps the project manager to identify the best strategy for each.

Chart 41:Stakeholder Analysis

Stakeholder Register Matrix							
Project Name	ISO 30414:2018 Project	ISO 30414:2018 Project - Stakeholder Analysis					
Main Sponsor	Government of Jamaica (Ministry of Industry, Investment and Commerce						
ID	Stakeholders	Functional Area	Roles - Responsibilities	Main Expectations	Major Requirements	Influence/Impact (Low-Medium-High)	Additional Comments
1	Government of Jamaica (GOJ) (Ministry of Industry, Investment and Commerce	Primarily responsible for business policy development, monitoring and evaluation, oversight, promotion of growth and jobs, social inclusion and consumer protection	Government Laws and Regulations, Project Budgeting Project Authorization	Profitability GDP Growth Achievement of International Standards	Operational Efficiency Meeting project deadlines and budget costs	High	The government believes that Jamaica has great potential in manufacturing and this sector is strategically important for Jamaica's growth and employment ambitions
2	Jamaica Manufacturers and Exporters Association	Association (Repository) of Companies in the Manufacturing and Exporting sector	Provide statistical data relating to the manufacturing and export industry in Jamaica	Sustained Economic and Employment growth	Achievement of ISO Certification Effective system monitoring	High	The Manufacturing Sector represents a critical component of the Jamaican economy.
3	Bureau of Standards Jamaica	Independent Assessor and certifier of manufacturers participating in the ISO programme	Monitor the objectives of the ISO certification	Standards Certification ISO Plan	Verification of system Registration of system	High	There is a deficiency in providing guidance to organizations on how to achieve each objective, or apply the required metrics
4	External Certification Body	ISO Certification service	Offer Training Conduct Gap Analysis checklist Conduct Internal Audit Issue Certificate of Conformity Issue ISO Certification	Satisfactory ISO 30414:2018 Management System Internal Training Audits conducted	Evidence of Internal Training Evidence of certified external audit	High	This body must be independent of the ISO Consultant
5	External Auditor	Confirm compliance with ISO standard	Ensure all procedures and processes are followed correctly Ensure documentation meets that ISO 30414:2018 standard	Evidence of Management Reviews Evidence of feedback, non-conformit issues addressed and corrective actions taken	Records of qualification, training, and experience Records of products and services review requirement and Records of conforming and non-conforming outputs Results of internal audit and Results of corrective actions	High	This body must be independent of the ISO Consultant

Note: Stakeholder Register Matrix (Own work)

Chart 42:Stakeholder Analysis cont'd

Stakeholder Register Matrix							
Project Name	ISO 30414:2018 Project	ISO 30414:2018 Project - Stakeholder Analysis					
Main Sponsor	Government of Jamaica (Ministry of Industry, Investment and Commerce						
ID	Stakeholders	Functional Area	Roles - Responsibilities	Main Expectations	Major Requirements	Influence/Impact (Low-Medium-High)	Additional Comments
6	ISO Consultant/ Registrar	Guide the ISO certification process	Evaluate existing HR processes and make recommendations for improvement Train users on new systems Observe work processes Review documents and records Interview Management and Staff	Ease of Access to information	Records of Conformity	High	The Consultant must be certified by the ISO
7	HR Consultant	Develop HR Systems Manual Selection of Employees for Internal Auditor training	Facilitate Gap Analysis Define HR objectives and help in building HR System Manual	Readily available data and information	Information on Employee skills and knowledge Employee learning and development plans	High	The HR Consultant must have over 10 years proven experience
8	Project Manager	Lead the Project Team in executing the project	Development and implementation of ISO Management System Develop Project Management Plan	Funding will be adequate Project will be completed on time and within budget All data will be available All stakeholders are identified and properly classified	Available budget skilled and knowledgeable staff	High	The project Manager must have over 15 years experience in leading ISO projects
9	Project Team	Initiate, Plan, Execute, Monitor and Control, and close project in line with project objectives	Communicate with and manage Stakeholder needs Update project documents	Available information from stakeholders	Leadership and development	High	The project team must be highly specialized and available
10	Employees within the Manufacturing Sector in Jamaica	Participate in employee training Assist in providing data	Participate in employee training Assist in providing data	Interpersonal and leadership skills applied Project successfully completed	Interpersonal and leadership skills applied Project successfully completed	High	Employees should make required information easily available
11	Other Industries/Sectors	Use Project Plan as guide to implementation	Use Project Plan as guide to implementation	Well-developed Project Management Plan Successful project implementation	Well-developed Project Management Plan Successful project implementation	Low	These industries rely on lessons learned from the current project

Note: Stakeholder Register Matrix (Own work)

Manage Stakeholder Engagement

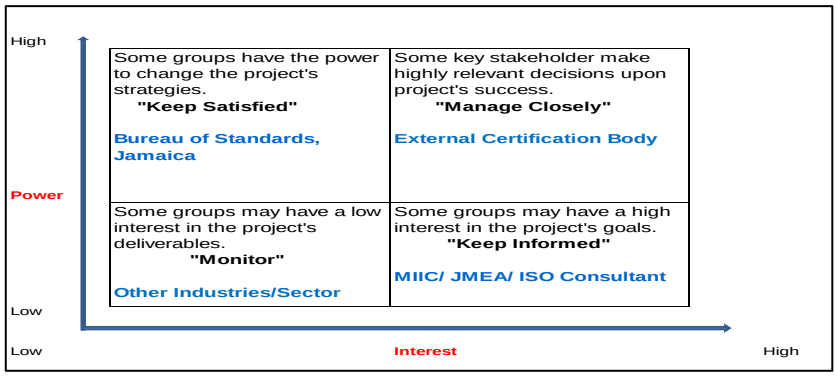
The stakeholder engagement plan and the communication plan are utilized in this process to keep the stakeholders informed and to address any issues that any stakeholder has with the project. The project manager and team meet with the stakeholders utilizing focus groups, stakeholder consultations, and project documents from previous projects, in order to document stakeholder issues and fix them. Interpersonal skills and effective communication skills in managing this process include feedback loops, non-verbal communication and presentation skills.

Stakeholders will be communicated with via Emails, hard copy document, memos, etc.

Stakeholder Engagement Matrix

The project will be utilizing three (3) matrices to assessing each stakeholder position, as well as their impact on the project and/or how they are impacted by the project. These are the Power-Interest Analysis, the Influence-Impact Analysis, and the Power-Influence Analysis.

Chart 43: Power-Interest Analysis

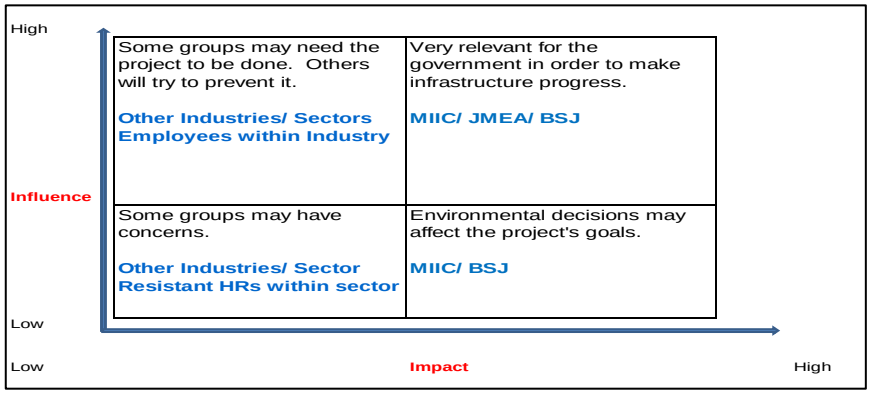


Note: Power-Interest Grid, Own Source

Influence-Impact Analysis

The Influence-Impact Analysis, shown below was used to identify the most influential and most impacted stakeholder groups so that a focused stakeholder management strategy and plan could be developed and executed.

Chart 44: Influence-Impact Analysis

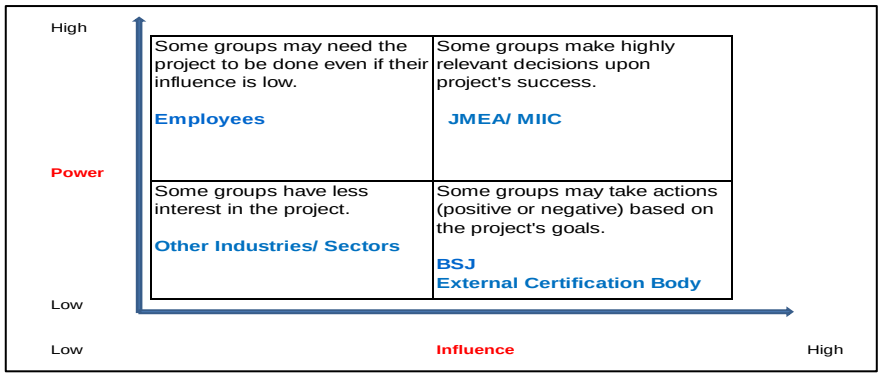


Note: Influence-Impact Analysis (Own Source)

Power-Influence Analysis

The Power-Influence Analysis, categorizes the project stakeholders by the power and influence they have on the project

Chart 45: Power-Influence Analysis



Note: Power-Influence Analysis (Own Source)

Monitor Stakeholder Engagement

This process examines whether the stakeholder engagement plan is being carried out according to plan, and whether it is working or not. If changes are to be made for the plan to work more effectively, then this will be handled through change requests.

4.12. Project Regenerative Development Plan

Regenerative development is the use of resources to improve society's wellbeing in a way that builds the capacity of the support systems needed for future growth. What sustainable development is to traditional economic development, regenerative development is to sustainable development. (Gabel, Regenerative Development: Going Beyond Sustainability, 2015). The design of this project ensured that there was alignment to regenerative development standards.

In addition, ISO 26000 - Guidance on social responsibility provides guidance on how businesses and organizations can operate in an ethical and transparent way that contributes to sustainable development with over 450 recommendations that directly impact the Sustainable Development Goals (SDG) goals. (ISO, 2018) Therefore, it is important that this ISO project advances the SDG by balancing the needs of the environmental, social and economic systems.

In measuring the impact of the project on regenerative and sustainable development, the P5 Impacts Analysis is used. The P5 Standard supports the alignment of projects with organizational goals for sustainability by focusing on the potential impacts of the project's

activities, results, and outcomes. (GPM Global, 2019). The P5 standards expand on the traditional sustainable project management focus on the triple bottom line, also known as the 3Ps (people, planet, profits), to consider five elements – Project, Process, People, Planet and Prosperity.

P5 Impact Analysis

In this section, the P5 Impact Analysis is applied in order to evaluate the impact of the project and its processes in the social, environmental, and economic dimensions.

Product and Process Impact – this has an average of 4.6 after applying the analysis, meaning that product and process has a high likelihood of impacting the project from a sustainability perspective. See results below:

Chart 46: P5 Impact Analysis – Product & Process Impacts

P5 Impact Analysis
Impacts

This impact will improve the project's outcome(s) from a sustainability perspective.
5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree

Category / Subcategory / Element	Description (Cause)	Potential Impact	Impact Score Before	Proposed Response	Impact Score After	Change
2.1 Product Impacts						
2.1.1 Lifespan of the product	Product will be updated as is necessary, and can last in its current state for 1 year	Gives the product time to be implemented and adopted by various organizations	4	Engage the service of a technical maintenance crew to upkeep the maintainnce of solor and recyling and other efficient state of th art equipment	5	1
2.1.2 Servicing of product	Product will be updated as is necessary, and can last in its current state for 1 year	Product will have the latest information on stakeholders, infrastructure and budget	4	Higher key experts for upkeep of state of the art equiptment	4	0
2.2 Process (Project Management) Impacts						
2.2.1 Effectiveness of project processes	Compliance with international standards	Ease of data and information	3	Greater oversight mechanisms in place	5	2
2.2.2 Efficiency of project processes	The implementation of proper practices utilizing ISO standards	International recognition	3	Greater investment potential	4	1
2.2.3 Fairness of project processes	Implementation of the project according to ISO, Regenerative and Sustainable standards	Buy-in of stakeholders	4	Increase in industry visibility	5	1
		Product and Process Average	**3.6**		**4.6**	**1.0**

P5 Impact Analysis: Template Adapted from greenprojectmanagement.org (Information Own Work)

People and Social Impact – this has an average of 3.6 after applying the analysis, meaning that the likelihood of people and the society impacting the project from a sustainability perspective, is almost neutral. See results below:

Chart 47: P5 Impact Analysis People & Social Impacts

Category / Subcategory / Element	Description (Cause)	Potential Impact	Impact Score Before	Proposed Response	Impact Score After	Change
3 People (Social) Impacts						
3.1 Labor Practices and Decent Work						
3.1.1 Employment and staffing	Upskilling of staff to carry out project implementation	May resist upskilling attempts	3	Award upskilling	2	-1
3.1.2 Labor/management relations	Included in ISO standards, and therefore strict adherence	Improvement in labor relations	5	Create standardoperating procedures to maintain labor relations		-5
3.1.3 Project health and safety	Included in ISO standards, and therefore strict adherence	Improvement in workplace health and safety	4	Award instances of health and safety demonstrated on the job	1	-3
3.1.4 Training and education	Increase in training costs arising from project implementation	Less persons being trained, or resistance to increasing training budget		Partner with the government to implement training		
3.1.5 Organizational learning	Documenting and sharing of lessons learned	Increased performance	4	Share best practices and lessons learned from other areas in initial stages	1	-3
3.1.6 Diversity and equal opportunity	Included in ISO standards, and therefore strict adherence	Improvement in equitable treatment employees	4	Eliminate barriers to gender-specific recruitment	1	-3
3.1.7 Local competence development	Increase in training and up-skilling costs arising from project implementation	Less persons being trained, or resistance to increasing training budget	4	Equip all levels of staff	1	-3
3.2 Society and Customers						
3.2.1 Community support	Local stakeholders interested in implementing standard	Increase in partnership for implementation	4	Widespread communication engagement and awareness campaigns	4	0
3.2.2 Public policy compliance	Satisfying the National Development Goals and Manufacturing Framework 2025	Increase in partnership for implementation	4	Increase communication of project	5	1
3.2.3 Protection for indigenous and tribal peoples	Included in ISO standards, and therefore strict adherence	Improvement in equitable treatment of stakeholders	4	Increase communication of project	5	1
3.2.4 Customer health and safety	Included in ISO standards, and therefore strict adherence	Improvement in equitable treatment of customers	4	Increase communication of project	5	1
3.2.5 Product and service labeling	Included in ISO standards, and therefore strict adherence	Improvement in packaging standards	4	Increase communication of project	5	1
3.2.6 Market communications and advertising	Communication and Advertising supported from the National level	Stakholders are awareof the changes implemented under the project.	4	Increase communication of project	5	1
3.2.7 Customer privacy	Included in ISO standards, and therefore strict adherence	Adherence to data privacy laws	4	Increase communication of project	5	1

P5 Impact Analysis: Template Adapted from greenprojectmanagement.org (Information Own Work)

Chart 48: P5 Impact Analysis - People Average

Impacts

This impact will improve the project's outcome(s) from a sustainability perspective.
5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree

Category / Subcategory / Element	Description (Cause)	Potential Impact	Impact Score Before	Proposed Response	Impact Score After	Change
3.3 Human Rights						
3.3.1 Non-discrimination	Equitable treatement of staff	All staff understand the purpose of the project	4	Enforce the zero tolerance on non-discrimition behavior	5	1
3.3.2 Age-appropriate labor	Employees workng past retirement age	Incompliance with child labor laws	3	Ensure that employees past retirement are employed favorably	4	1
3.3.3 Voluntary labor	N/A	N/A	1	N/A	1	0
3.4 Ethical Behavior						
3.4.1 Procurement practices	Resources are within standard	Implementation in accordance with standard	4	Implement in accordance with standard	5	1
3.4.2 Anti-corruption	Compliance with ISO standards on quality and corruption	Investors and staff buy-in	3	Implement and share information with stakeholders	5	2
3.4.3 Fair competition	All business sizes are considered	Investors and staff buy-in	3	Engage with all businesses in the industry	5	2
		People Average	**3.7**		**3.6**	**-0.3**

P5 Impact Analysis: Template Adapted from greenprojectmanagement.org (Information Own Work)

Planet and Environmental Impact – this has an average of 4.9 after applying the analysis, meaning that the likelihood of planet and the environment impacting the project from a sustainability perspective, is very high. See results below:

Chart 49: P5 Analysis - Planet & Environmental Impacts

Impacts

This impact will improve the project's outcome(s) from a sustainability perspective.
5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree

Category / Subcategory / Element	Description (Cause)	Potential Impact	Impact Score Before	Proposed Response	Impact Score After	Change
4 Planet (Environmental) Impacts						
4.1 Transport						
4.1.1 Local procurement	Infrastructure is available internationally, and support is available locally	Local support available	3	Train more local ISO support officers	5	2
4.1.2 Digital communication	Maintenance of information in a shared place	Easy retrieval of information	3	Offer training on information software and its access	5	2
4.1.3 Traveling and commuting	Employees can work remotely	Increased productivity from employees	4	Increased productivity from employees	5	1
4.1.4 Logistics	Supplies can be sourced locally and internationally	Improvement in implementation time	4	Communicate schedule changes organization-wide	5	1
4.2 Energy						
4.2.1 Energy consumption	Reduce energy consumption by using energy efficient supplies and materials	Lower energy cost with minimal environmental impact	2	Implement energy efficient design practivies and investing in energy efficient materials, fixtures and supplies	5	3
4.2.2 CO2 emissions	Proper management of practices and procedures put in place to manage and reduce the carbon footprint from project activities.	Contributes to the health and safety of employees as well as help minimize the effects of natural disasters and slow down the process of climate change	3	Invest in alternative energy where energy can be reused and conserved simultaneously	4	1
4.2.3 Clean energy return	Implement processes to generate clean energy and secondary energy sources options.	Reduce the amount of fuel needed for electricity and reduction of green house gas emissions	2	Invest in an alternative energy source	4	2
4.2.4 Renewable energy	Implement natural practicies to generate renewable energy recourses throughout the project	Reduction in impact of climate change and less air and water pollution	2	Sustainable energy efficient practices as well as educating staff of the importance of energy efficiency within the office space	5	3

P5 Impact Analysis: Template Adapted from greenprojectmanagement.org (Information Own Work)

Chart 50: P5 Impact Analysis - Land Water & Air (Planet Average)

Impacts

This impact will improve the project's outcome(s) from a sustainability perspective.
5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree

Category / Subcategory / Element	Description (Cause)	Potential Impact	Impact Score Before	Proposed Response	Impact Score After	Change
4.3 Land, Water, and Air						
4.3.1 Biological diversity	Consideration of living organisms within our eco-system throughout the lifecycle of the project	Healthy and productive eco system that is able to thrive in a resistant environment	4	Healthy environment that protects natural resources and utilizes them in a productive way	5	1
4.3.2 Water and air quality	Preservation of the impact on the water table and naturally flowing bodies of water in surrounding areas or in close proximity	Helps to preserve the natural elements and encourages design and planning around these elements	3	Integrated natural elements the project and improved air quality	5	2
4.3.3 Water consumption	Controlled and necessary use of water during construction phase as well as implementation of water peserving practicies	Lower environmental damage and reduce cost of water use on the project	3	Invest in grey water treatment and water saving practicies	5	2
4.3.4 Sanitary water displacement	The proper management and handling of water run off and grey water treatment	Reduction and revention of water related illnesses	3	Healthier staff where production can be maintained	5	2
4.4 Consumption						
4.4.1 Recycling and reuse	Implementation of waste minimizing policies and responsible use of materials	Protects the natural resources and reduce pollution	3	Utilization of reusable natural products and materials within the project and work space	5	2
4.4.2 Disposal	Enforce proper disposal practicies to reduce contamination and illness	Irresponsible disposal can cause contamination of the soil, air and water	3	Responsible and reliable disposal system that preserves the environment	5	2
4.4.3 Contamination and pollution	Utilization of eco friendly materials and products to reduce contaminants	Contamination of our eco system and increased sicknesses and diseases	3	Utilization of materials and products that do not contaminate the environment	5	2
4.4.4 Waste generation	Implement practicies that actively reuse and recycle products to reduce environmental impact	Attract unwanted pests and induce harmful bacteria and viruses	3	Encourage waste minization by promoting a circular economy withing the company	5	2
		Planet Average	**3.0**		**4.9**	**1.9**

P5 Impact Analysis: Template Adapted from greenprojectmanagement.org (Information Own Work)

Prosperity and Economic Impact – this has an average of 5.0 after applying the analysis, meaning that the likelihood of business and economics impacting the project from a sustainability perspective, is very high. See results below:

Chart 51: P5 Impact Analysis Prosperity (Economic) Impacts

Impacts

5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree

Category / Subcategory / Element	Description (Cause)	Potential Impact	Impact Score Before	Proposed Response	Impact Score After	Change
5 Prosperity (Economic) Impacts						
5.1 Business Case Analysis						
5.1.1 Modeling and simulation	A physical, as well as Mathematical Modeling and Simulation done in order to show the Project Sponsors and Stakeholders, the potential viability of the product against any alternatives.	Provides the Project Sponsors and Stakeholders, with the reason why the Project/Product should be invested in.	4	Invest (buy-into) in Project	5	1
5.1.2 Present value	Assuming a discount rate of 6%, the Project's Present Value is USD$159,000.00 and its NPV is USD$80,000.00	Provides the stakeholders with financial proof that the project/product is favorable.	4	Buy-in to project	5	1
5.1.3 Direct financial benefits	Copletion within estimated budget of USD$159,000.00 Completion within scheduled time of 110 days Reduction in employee costs	Helps to secure future funding, should the Product seek to secure either private or public funding.	4	Implement project, instead of alternative	5	1
5.1.4 Return on investment	The Project has used the Cash Flow Return on Investment (CFROI), to look at its performance, considering inflation. The Project's CFROI is 17.72% which means a gain in the investment value of the project of USD$11,000.00	Proves to Investors that the Project/product can achieve financial sustainability	4	Maintain a positive ROI by communicating the strategic goals to the stakeholders, so each can play their part	5	1
5.1.5 Benefit-cost ratio	The Project's Cost Benefit Ratio is **1.00**. This means that the project is expected to deliver a positive net present value to a firm and its investors	The Project/Product will deliver positive returns to Investors, and enhance any future development proposals	4	Strive to control costs, by utilising/maintaining a proper spreadsheet, or reporting tool [project management software], that gives alerts and triggers signaling threshold performance limits.	5	1
5.1.6 Internal rate of return	At a rate of 6%, the project's IRR is USD$206,000.00 which indicates that the project will yield an annualized Return of over USD$41,000.00 and makes the project very lucrative.	The Project's IRR is higher than alternative investments, making it a better project.	4	Monitor project for IRR improvement over time	5	1
5.2 Business Agility						
5.2.1 Flexibility/optionality	Utilization of up to date [current] electronic infrastructure	May cost more financially in the short term May be difficult to implement	3	Implement technology In parts Maintain infrastructure to avoid repair and replacement costs	5	2
5.2.2 Business flexibility	Digitalization of capital reporting processes	Easier access to and retrieval of information	4	Introduction of state of the art technology processes within the manufacturing industry	5	1
5.3 Economic Stimulation						
5.3.1 Local economic impact	Increase in small and medium sized manufacturing business Increase in loans for manufacturing	Increase in employment Increase in production Growth in GDP	4	Promotion of Jamaica's Manufacturing industry globally	5	1
5.3.2 Indirect benefits	Advancing the cause for Regenerative and Sustainable Development Improvement of Jamaica's Ease of Doing Business global ranking	Expansion of the Manufacturing Sector Increase in Investments	4	Promote compliance with ISO 30414:2018	5	1
		Prosperity Average	**3.9**		**5.0**	**1.1**
		Overall Average	**3.5**		**4.4**	**0.8**

P5 Impact Analysis: Template Adapted from greenprojectmanagement.org (Information Own Work)

Overall, the P5 Impact Analysis has an average result of 4.4, which means that the factors affecting the project from a sustainability perspective, is high.

5 CONCLUSIONS

Based on the project plan, the following conclusions can be drawn in accordance with the general and specific objectives for the project. The general objective for the project is, "To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018". The specific objectives for the project are as follows:

1. To **develop a Project Management Plan** framed within the standards of the Project Management Institute "to document the processes, practices, inputs, tools and techniques" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018

The project management plan has been developed for all ten (10) Knowledge areas, documenting all the processes, practices, inputs, tools and techniques of the Project Management Institute, and its standards and ethics. In line with ISO 30414:2018, all processes and work tools and techniques have also been documented, according to the requirements and timeline for implementation.

2. **To develop the Integration Management Plan** "to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

The Integration Management Plan has been fully developed, taking care to include the Project Charter, which is the document that formally authorizes the project, and identifies the initial requirements that stakeholders expect from the execution of the project. Research and evaluation has been conducted on the HR industry in Jamaica, and the business case

supports the need for the project. There has been Sponsor and management agreements, and reviews conducted in consideration of the assumptions, risks and constraints which have been documented. Care has been taken to consider enterprise environmental factors and organizational process assets, including the lessons learned register and plan for integrated change control, in cases where changes will be required to the project, and which may impact the scope, schedule, cost and quality baselines. All necessary documentation that will formalize the activities and overall process management groups that will formally complete the project, are done in this knowledge area. There is full confidence that the project will avoid scope creep, once there is full adherence to the plan and its tools and techniques.

3. To **develop the Scope Management Plan** "to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

The scope management plan has been fully developed, to include information from the requirements management plan (consisting of stakeholder and business requirements). The project team has used data analysis and representation in order to develop the requirements traceability matrix, so that the requirements can be traced back to the relevant stakeholder. The project charter has been used to define the project scope and developing the scope statement that describe the project deliverables in detail. The project is expected to last for 18.26 months, with a budget of USD$178,250.00.

The work breakdown structure for the project has decomposed the deliverables into smaller work packages, allowing for better estimation of cost, time and resource assignments. The WBS, WBS Dictionary and the scope statement make up the project scope baseline. The WBS gives a more detailed description of the work, scheduling and cost estimates for the project. The tools and techniques that will validate and control the scope have been documented.

4. To **develop the Schedule Management Plan** "to include the processes required to manage the timely completion" (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

The schedule plan has been fully developed by the project manager and the project team, in order to ensure a timely completion of the project. The activities required to complete the project have been defined (decomposed into activities), and the activities list has been documented. Rolling wave planning has been adapted in this case, as work packages happening later in the project will be decomposed at a later date. The activities have been sequenced in the order in which they will be performed using the precedence diagramming method and the schedule network diagram. The Program Evaluation and Review (PERT) technique has been used to calculate the activity durations and standard deviation.

Microsoft projects was used to develop the schedule, with the Gantt chart showing the activity start and end dates, durations, and resource allocation. The project schedule network diagram has been used to represent the duration, sequence and critical path of the activities. Earned Value Management Analysis has been used to calculate the schedule variance and schedule performance index for the project. Based on calculations, the project is on schedule.

5. To **develop the Cost Management Plan** "to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget.

The cost management plan has been created, highlighting the project budget, the cumulative budget, and any variances between the planned value and actual costs for the project. The total project budget is USD$178,250.00, broken down into estimated costs USDUSD155,000.00, 10% Contingency Reserves of USD$15,500.00 and a 5% Management Reserves of USD$7,750.00. The cost baseline for the project is

USD$170,500.00, (calculated cost estimate + contingency reserve). Total project budget then is calculated as the cost baseline + management reserve. Costs have been estimated using a bottom-up estimating approach which breaks down the work to be done, in order to identify its pieces, and then aggregating or working backwards to form the overall cost for each activity.

The earned value, along with variance analysis was used as a tool to track the performance and control the project budget. The project had an overall positive cost variance, with earned value more than actual costs, and equal to planned value. This means that the project will be completed within budget. The cost performance index (CPI), measuring the financial effectiveness and efficiency of the project (the amount of completed work for every monetary unit spent) was equal to 1, meaning that the project was performed on budget.

6. To **develop the Quality Management Plan** "to include the processes for incorporating the industry's quality policy regarding planning, managing, and controlling project and product quality requirements" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder's expectations.

The quality plan was developed in accordance to PMI standards. The quality management approach was defined, metrics were identified, and customer requirements documented, identifying the quality standard that each customer required from the project. A customer-prioritization analysis was done to rank/prioritize each customer requirement.

The quality policy statement acted as a benchmark to monitor and control quality, in addition to the Plan-Do-Check-Act and Root Cause Analysis. This ensured that any identified non-conformances or variation from stakeholders' quality standards/ requirements were detected, identified, scrutinized detecting and scrutinizing any sources of variation that would cause the project to deviate from customer requirements. Basically, to Plan means to determine goals for a process and needed changes to achieve them; Do means to implement the changes; Check means to evaluate the results in terms of performance; and Act means to standardize and stabilize the change or begin the cycle again, depending on the results and

The ISO standards (International Organization for Standardization) embeds the PCDA as a monitoring tool for quality.

7. To **develop the Resource Management Plan** "to include the processes to identify, acquire and manage the resources needed to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

   The physical and human resources were identified and categorized for the project. The human resources include the sponsor, co-sponsor, project manager and team, subject matter experts – ISO consultant and HR consultant, and the technical resources include data-reporting software for human capital reporting, laptops and internet. An organization chart was detailed, showing the various team roles, competencies and their authority levels. A bottom-up estimating technique was done to estimate activity resources and a responsibility assignment matrix designed to show the resource assigned to each work package.

   A Team Charter was done which showed how the team would communicate with each other, decision-making, meeting conduct, and how they would problem-solve (escalate issues) within the team. To evaluate team performance, a performance management system was used to measure performance, identify gaps, and recommend performance improvement activities such as training and skills development. At all times, the project manager ensured to use interpersonal and team skills to maintain a smooth project functionality.

8. To **develop the Communications Management Plan** to "include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

Effective communication is key to keeping all stakeholders apprised of the essential project-related information. Within the project, the project manager used interpersonal and communication skills in developing the communication management plan. The communication matrix was created in order to identify the communication requirements for the project – the type of communication, purpose, medium, frequency, what should be communicated and the person who is responsible for communicating. Change requests have been used to monitor any changes to the communication methods and plan that have been documented.

9. To **develop the Risk Management Plan** "to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

The risk management plan was developed, detailing how risks would be identified, implemented, managed and monitored. A risk breakdown structure was used to identify, assess and ultimately report on the risks identified. As each risk was identified, the project manager ensured that the causes of the risks, and each consequence was documented and communicated among the team. A probability and impact matrix was also developed that identified and ranked the probability of each risk occurring. In the risk planning, the risk of not completing each audit process on time, the devaluation of the US$ currency and the upcoming ISO 30414:2018 review, were the top risks, when the risks were prioritized. A risk response documented was developed that alo put

forward any corrective actions that could be taken to minimize or prevent the risks from occurring. To monitor the risks, the project manager, also in accordance with ISO guidelines, used audits to determine monitor risks so that they do not adversely affect the project.

10. To **develop the Procurement Management Plan** "to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team" (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

The procurement management plan detailed the procurement approach for the project, the methods that will be used to evaluate, select and create formal contractual agreements as well as managing the company's ongoing supplier relationships which are necessary to procure any resource whether inside or outside of the project team.

The roles, of the persons in charge of each procurement level was documented, and their responsibilities and authority determined. The procurement schedule and deadline was shared for when an RFP goes out, how received proposals are evaluated, and selected, and how procurement contracts would be awarded. The contractual agreements and approved change requests were used to control procurements, managing the relationship between buyer and seller.

11. To **develop the Stakeholder Management Plan** "to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact" (Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop

appropriate management strategies for effectively engaging stakeholders in project decisions and execution.

The stakeholder management plan was prepared to show how stakeholders would be identified, engaged and monitored on the project. In order to achieve this, the stakeholder register was created to identify who the stakeholders were, their names and positions within whichever organization or area that they were from, their contact information and the functional area in which they operated.

The stakeholder matrix was then created that documented each stakeholder, identified their roles and what they expect from the project. After this, the stakeholder engagement matrix was created that categorized the stakeholders according to their expected interest, power (authority), influence and impact on the project. Change requests were used to monitor stakeholder engagements, to see whether the plan was executed according to plan, or whether changes were necessary.

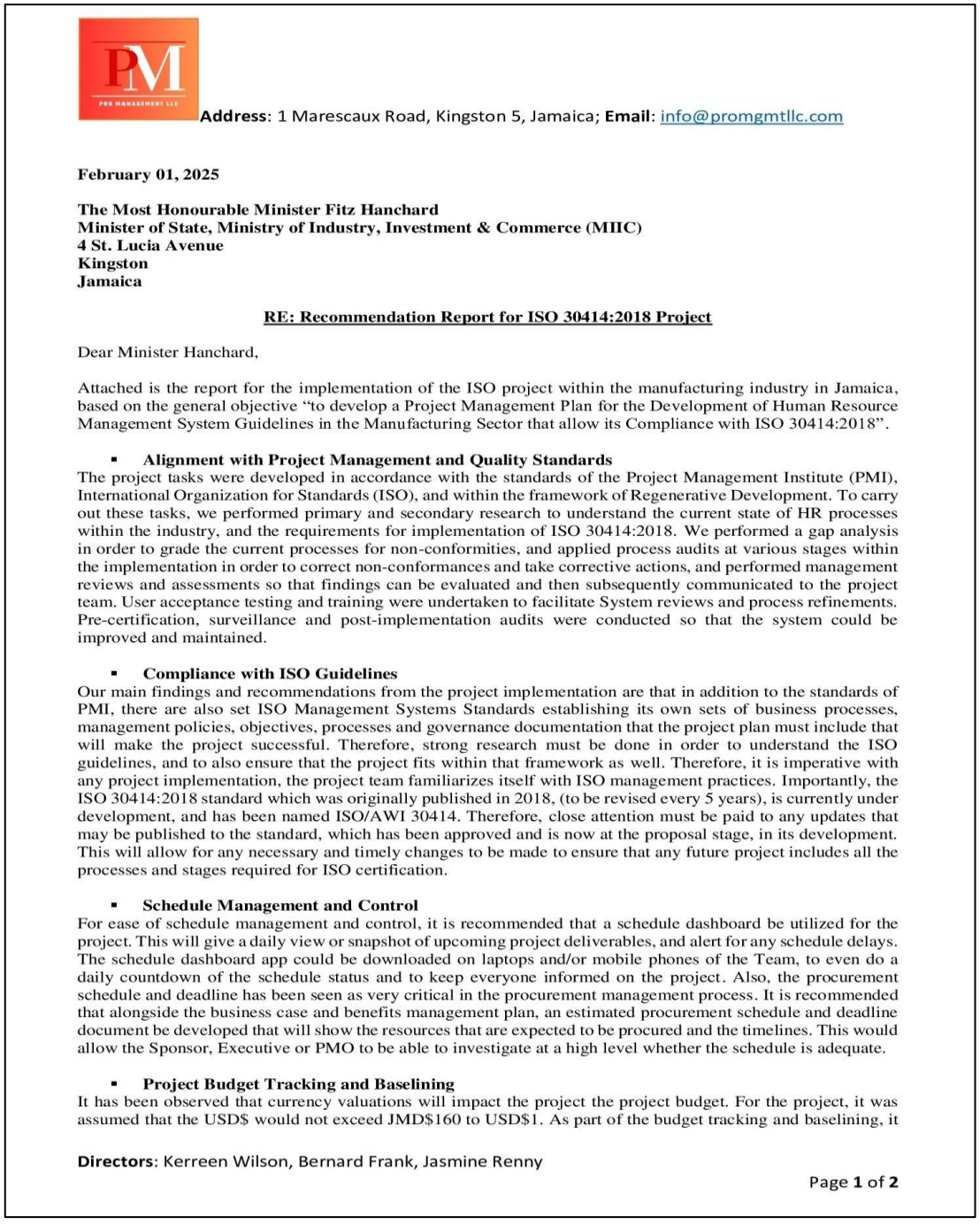
12. To develop a Project Management Plan framed within the standards of **Regenerative Development** that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

The ISO 30414:2018 supports Goal 8 of the Sustainable Development Goals (SDG), which is about promoting inclusive and sustainable economic growth, employment and decent work for all. According to (ISO, 2018), ISO has published more than 22 000 International Standards and related documents that represent globally recognized guidelines and frameworks based on international collaboration. Built around consensus, they provide a solid base on which innovation can thrive and are essential tools to help governments, industry and consumers contribute to the achievement of every one of the SDGs.

It is now common practice for projects to be executed according to Green Project management standards. For this project, a P5 Impacts Analysis (focuses on five elements: Project, Process, People, Planet and Prosperity) was used to measure the potential impacts of the project's activities, results, and outcomes on regenerative and sustainable development. A rating from 1 to 5 was given to each element, 5 being strongly agree and 1 being strongly disagree. From the results of the analysis, it was found that **Product and Process Impact** had an average of 4.6, meaning that product and process had a high likelihood of impacting the project from a sustainability perspective; **People and Social Impact** had an average of 3.6, meaning that the likelihood of people and the society impacting the project from a sustainability perspective, was almost neutral; **Planet and Environmental Impact** had an average of 4.9, meaning that the likelihood of planet and the environment impacting the project from a sustainability perspective, was very high; **Prosperity and Economic Impact** had an average of 5.0, meaning that the likelihood of business and economics impacting the project from a sustainability perspective, was very high. Overall, the P5 Impact Analysis had an average result of 4.4, meaning that the factors affecting the project from a sustainability perspective, was high.

6 RECOMMENDATIONS

Figure 72: Project Recommendation - Page 1



Address: 1 Marescaux Road, Kingston 5, Jamaica; **Email**: info@promgmtllc.com

February 01, 2025

The Most Honourable Minister Fitz Hanchard
Minister of State, Ministry of Industry, Investment & Commerce (MIIC)
4 St. Lucia Avenue
Kingston
Jamaica

RE: Recommendation Report for ISO 30414:2018 Project

Dear Minister Hanchard,

Attached is the report for the implementation of the ISO project within the manufacturing industry in Jamaica, based on the general objective "to develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018".

- **Alignment with Project Management and Quality Standards**

The project tasks were developed in accordance with the standards of the Project Management Institute (PMI), International Organization for Standards (ISO), and within the framework of Regenerative Development. To carry out these tasks, we performed primary and secondary research to understand the current state of HR processes within the industry, and the requirements for implementation of ISO 30414:2018. We performed a gap analysis in order to grade the current processes for non-conformities, and applied process audits at various stages within the implementation in order to correct non-conformances and take corrective actions, and performed management reviews and assessments so that findings can be evaluated and then subsequently communicated to the project team. User acceptance testing and training were undertaken to facilitate System reviews and process refinements. Pre-certification, surveillance and post-implementation audits were conducted so that the system could be improved and maintained.

- **Compliance with ISO Guidelines**

Our main findings and recommendations from the project implementation are that in addition to the standards of PMI, there are also set ISO Management Systems Standards establishing its own sets of business processes, management policies, objectives, processes and governance documentation that the project plan must include that will make the project successful. Therefore, strong research must be done in order to understand the ISO guidelines, and to also ensure that the project fits within that framework as well. Therefore, it is imperative with any project implementation, the project team familiarizes itself with ISO management practices. Importantly, the ISO 30414:2018 standard which was originally published in 2018, (to be revised every 5 years), is currently under development, and has been named ISO/AWI 30414. Therefore, close attention must be paid to any updates that may be published to the standard, which has been approved and is now at the proposal stage, in its development. This will allow for any necessary and timely changes to be made to ensure that any future project includes all the processes and stages required for ISO certification.

- **Schedule Management and Control**

For ease of schedule management and control, it is recommended that a schedule dashboard be utilized for the project. This will give a daily view or snapshot of upcoming project deliverables, and alert for any schedule delays. The schedule dashboard app could be downloaded on laptops and/or mobile phones of the Team, to even do a daily countdown of the schedule status and to keep everyone informed on the project. Also, the procurement schedule and deadline has been seen as very critical in the procurement management process. It is recommended that alongside the business case and benefits management plan, an estimated procurement schedule and deadline document be developed that will show the resources that are expected to be procured and the timelines. This would allow the Sponsor, Executive or PMO to be able to investigate at a high level whether the schedule is adequate.

- **Project Budget Tracking and Baselining**

It has been observed that currency valuations will impact the project the project budget. For the project, it was assumed that the USD$ would not exceed JMD$160 to USD$1. As part of the budget tracking and baselining, it

Directors: Kerreen Wilson, Bernard Frank, Jasmine Renny

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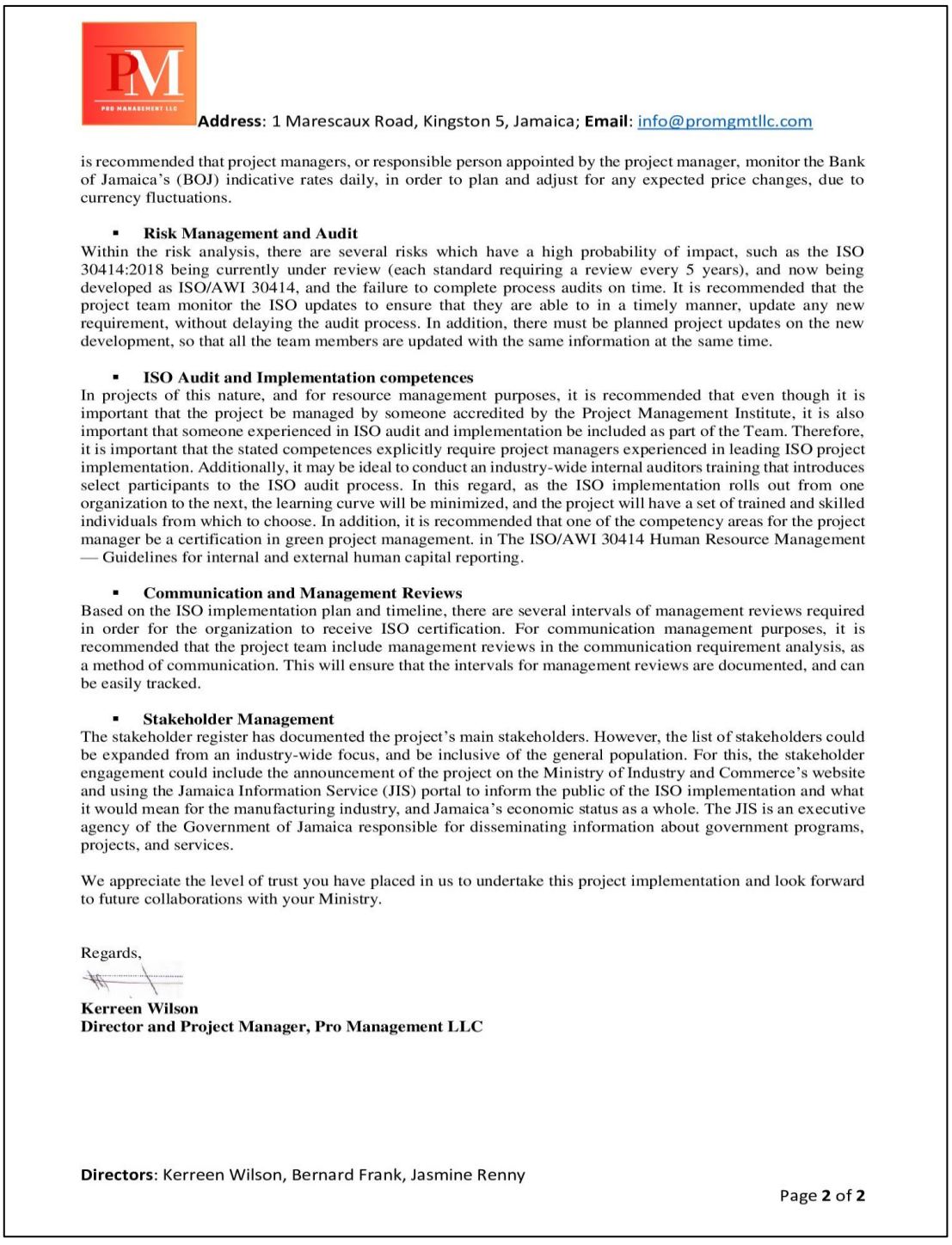
Note: Recommendation – Page 1 (Own Work)

Figure 73: Project Recommendation - Page 2



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is recommended that project managers, or responsible person appointed by the project manager, monitor the Bank of Jamaica's (BOJ) indicative rates daily, in order to plan and adjust for any expected price changes, due to currency fluctuations.

- **Risk Management and Audit**

Within the risk analysis, there are several risks which have a high probability of impact, such as the ISO 30414:2018 being currently under review (each standard requiring a review every 5 years), and now being developed as ISO/AWI 30414, and the failure to complete process audits on time. It is recommended that the project team monitor the ISO updates to ensure that they are able to in a timely manner, update any new requirement, without delaying the audit process. In addition, there must be planned project updates on the new development, so that all the team members are updated with the same information at the same time.

- **ISO Audit and Implementation competences**

In projects of this nature, and for resource management purposes, it is recommended that even though it is important that the project be managed by someone accredited by the Project Management Institute, it is also important that someone experienced in ISO audit and implementation be included as part of the Team. Therefore, it is important that the stated competences explicitly require project managers experienced in leading ISO project implementation. Additionally, it may be ideal to conduct an industry-wide internal auditors training that introduces select participants to the ISO audit process. In this regard, as the ISO implementation rolls out from one organization to the next, the learning curve will be minimized, and the project will have a set of trained and skilled individuals from which to choose. In addition, it is recommended that one of the competency areas for the project manager be a certification in green project management. in The ISO/AWI 30414 Human Resource Management — Guidelines for internal and external human capital reporting.

- **Communication and Management Reviews**

Based on the ISO implementation plan and timeline, there are several intervals of management reviews required in order for the organization to receive ISO certification. For communication management purposes, it is recommended that the project team include management reviews in the communication requirement analysis, as a method of communication. This will ensure that the intervals for management reviews are documented, and can be easily tracked.

- **Stakeholder Management**

The stakeholder register has documented the project's main stakeholders. However, the list of stakeholders could be expanded from an industry-wide focus, and be inclusive of the general population. For this, the stakeholder engagement could include the announcement of the project on the Ministry of Industry and Commerce's website and using the Jamaica Information Service (JIS) portal to inform the public of the ISO implementation and what it would mean for the manufacturing industry, and Jamaica's economic status as a whole. The JIS is an executive agency of the Government of Jamaica responsible for disseminating information about government programs, projects, and services.

We appreciate the level of trust you have placed in us to undertake this project implementation and look forward to future collaborations with your Ministry.

Regards,

Kerreen Wilson
Director and Project Manager, Pro Management LLC

Directors: Kerreen Wilson, Bernard Frank, Jasmine Renny

Page **2** of **2**

Note: Recommendation – Page 2 (Own Work)

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

Regenerative development is “the use of resources to improve society’s wellbeing in a way that builds the capacity of the support systems needed for future growth. What sustainable development is to traditional economic development, regenerative development is to sustainable development” (Gabel, Regenerative Development: Going Beyond Sustainability, 2015). The design of this project ensured that there was alignment to regenerative development standards.

The general objective of the project was, "To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018", with the specific objective being, to develop this Project Management Plan framed within the standards of Regenerative Development that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018. (It is important to note that ISO 30414:2022 will replace the previously published ISO 30414:2018, and is now at the ‘under development’ stage, entitled, ISO/AWI 30414. (ISO, n.d.).

According to (Human Capital Management Institute, n.d.), “the ISO 30414 is the first-ever set of guidelines for human capital reporting released by the International Organization for Standardization (ISO) at the end of 2018”. ISO 30414 provides guidance on the human capital metrics companies should report internally and those they should

disclose publicly. The standards include details on the evaluation, measurement, and formatting of data. The main purpose is to make the contribution of human capital to the business more transparent to investors. **This ISO standard contributes to the following Sustainable Development Goals**:

Figure 74: Sustainable Development Goals in alignment with ISO 30414:2018 (ISO, n.d.)

Sustainable Development Goals		
Goal No.	**Title**	**Description**
Goal 3	**Good Health and Well-being**	Ensure healthy lives and promote well-being for all at all ages
Goal 4	**Quality Education**	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5	**Gender Equality**	Achieve gender equality and empower all women and girls
Goal 8	**Decent Work and Economic Growth**	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9	**Industry, Innovation and Infrastructure**	Build resilient infrastucture, promote inclusive and sustainable industrialization and foster innovation
Goal 10	**Reduced Inequalities**	Reduce inequality within and among countries

Note: Sustainable Development Goals, 2023 Adapted from (Table, Own Work)

The concept of sustainability has been gaining importance and influencing the development of an approach towards employees referred to as Sustainable Human Resource Management (SHRM: Human Capital Report: Industry Manufacturing). This project, in providing the project management plan that validates the regenerative development component, will have a positive effect on the manufacturing industry in Jamaica, while fulfilling the sustainable development goals: 3, 4, 5, 8, 9 and 10.

Regenerative development seeks to increase the efficiency and capacity of our industrial and technological metabolism while providing life-support services and products for the world's population. Its key interlinked principles are: (1) The whole world is now

the only relevant unit of problem solving; (2) The long term is the framework in which we must operate; (3) Everyone is needed; (4) Everybody wins; (5) Transparency is key; (6) Capacity, not problems, must be our focus; (7) The world's needs are actually potential markets; (8) Design replaces politics; (9) More with less must be the design ethic; (10) Biology replaces mechanics; (11) Development, not growth is our goal; (12) Scalability is essential; and (13) Vision drives action. Money follows vision (Gabel, Regenerative Development: Going Beyond Sustainability, Fall 2015)

Human Resource development is one of the principles of SHRM that should be implemented consistently along with other SHRM principles, which means, e.g., that the development of employees should be carried out having a long-term perspective in mind. (Piwowar-Sulej, 2021). This is further corroborated by (Gabel, Regenerative Development: Going Beyond Sustainability, 2015), where he states that, "The principles of regenerative development construct a frame of reference for looking at the world—at our problems, resources, and options—in a way that can lead to a future of ecosystem health, economic wealth, and human prosperity".

The following statement by (ISO, n.d.) sums up the alignment of ISO with Regenerative and Sustainable Development, and guarantees that a project that encourages compliance with these ISO standards, does validate regenerative development. "This document provides guidelines for internal and external human capital reporting (HCR). The objective is to consider and to make transparent the human capital contribution to the organization in order to support sustainability of the workforce. This document is

applicable to all organizations, regardless of the type, size, nature or complexity of the business, whether in the public, private or voluntary sector, or a not-for-profit organization" (ISO, n.d.)

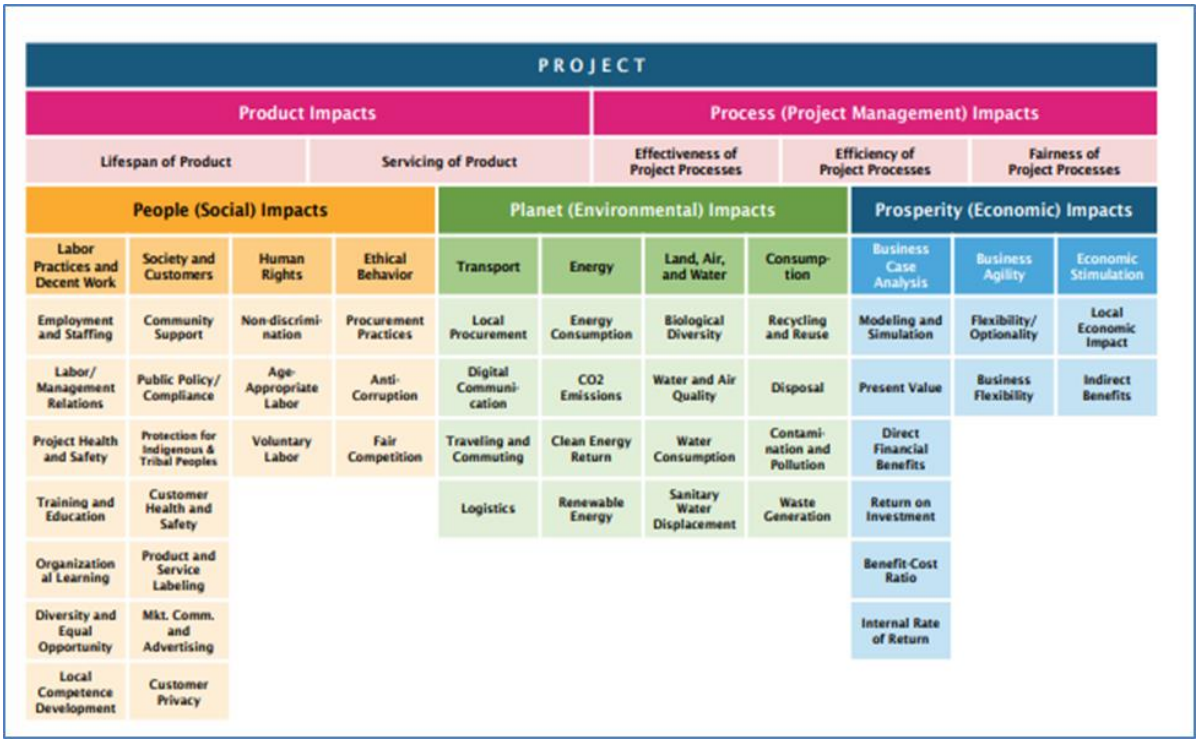
Often, sustainability measures are added onto projects for overarching accountability and reporting purposes, typically to hit general sustainability strategic goals or compliances. However, these overarching sustainability measures often fail to accurately capture the everyday impacts of everyday project management activities and only provide organizations with generalized understandings of their sustainability impacts. (Adel, 2021). In measuring the impact of the project on regenerative and sustainable development, the P5 Impacts Analysis is used.

P5 or PRiSM is an abbreviation of **PR**oject **I**ntegrating **S**ustainability **M**easures. It is a principle-based methodology that applies a value-maximization approach that focuses on integrating sustainability into the entirety of the project lifecycle. It predominantly leverages existing organizational systems to achieve unilateral sustainable benefits realisation with a clear focus on process and the final product sustainability. (Adel, 2021)

PRiSM is built upon Green Project Management's P5 Standards for Sustainability in Project Management. The P5 Standard supports the alignment of projects with organizational goals for sustainability by focusing on the potential impacts of the project's activities, results, and outcomes (GPM Global, 2019). The P5 standards expand on the traditional sustainable project management focus on the triple bottom line, also known as the 3Ps (people, planet, profits), to consider five elements – Project, Process, People, Planet

and Prosperity. These standards aim to combine project management goals with the UN Sustainable Development Goals and accurately capture the holistic impact of projects and/or products throughout their entire lifespan, along with service activities. By incorporating social and environmental objectives into each project, organizations can better track and monitor their sustainability activities on a project level which helps easily identify areas for improvements. This also allows organizations to provide greater levels of accountability and transparency than portfolio-wide sustainability goals. In the chart below, we show the areas of impact analysis measured by P5. (Adel, 2021)

Figure 75: P5 Impacts Analysis (GPM Global, 2019)



Note: P5 Impacts Analysis, Adapted from (GPM Global, 2019)

P5 Impact Analysis of Project

The impact Analysis for this project, yields that (1) Product and Process average was 3.6, with an impact if 4.6; People average was 3.7, with an impact of 3.6; (3) Planet Average was 3.0, with an impact of 4.9; and prosperity average was 3.9, with an impact of 5.0. The overall P5 average was 3.4, with an impact of 4.4. The results are displayed below:

Figure 76: P5 Impacts Analysis – Product Impacts (GPM Global, 2019)

P5 Impact Analysis
Impacts

This impact will improve the project's outcome(s) from a
5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disag

Category / Subcategory / Element	Description (Cause)	Potential Impact	Impact Score Before	Proposed Response
2.1 Product Impacts				
2.1.1 Lifespan of the product	Product will be updated as is necessary, and can last in its current state for 1 year	Gives the product time to be implemented and adopted by various organizations	4	Engage the service of a technical maintenance crew to upkeep the maintainnce of solor and recyling and other efficient state of th art equipment
2.1.2 Servicing of product	Product will be updated as is necessary, and can last in its current state for 1 year	Product will have the latest information on stakeholders, infrastructure and budget	4	Higher key experts for upkeep of state of the art equiptment
2.2 Process (Project Management) Impacts				
2.2.1 Effectiveness of project processes	Compliance with international standards	Ease of data and information	3	Greater oversight mechanisms in place
2.2.2 Efficiency of project processes	The implementation of proper practices utilizing ISO standards	International recognition	3	Greater investment potential
2.2.3 Fairness of project processes	Implementation of the project according to ISO, Regenerative and Sustainable standards	Buy-in of stakeholders	4	Increase in industry visibility
		Product and Process Average	**3.6**	

Note: P5 Impacts Analysis, Adapted from (GPM Global, 2019) Chart, Own work

Figure 77: P5 Impacts Analysis – People/Social Impacts (GPM Global, 2019)

Impacts

This impact will improve the project's outcome(s) from a
5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disag

Category / Subcategory / Element	Description (Cause)	Potential Impact	Impact Score Before	Proposed Response
3 People (Social) Impacts				
3.1 Labor Practices and Decent Work				
3.1.1 Employment and staffing	Upskilling of staff to carry out project implementation	May resist upskilling attempts	3	Award upskilling
3.1.2 Labor/management relations	Included in ISO standards, and therefore strict adherence	Improvement in labor relations	5	Create standardoperating procedures to maintain labor relations
3.1.3 Project health and safety	Included in ISO standards, and therefore strict adherence	Improvement in workplace health and safety	4	Award instances of health and safety demonstrated on the job
3.1.4 Training and education	Increase in training costs arising from project implementatiom	Less persons being trained, or resistance to increasing training budget		Partner with the government to implement training
3.1.5 Organizational learning	Documenting and sharing of lessons learned	Increased performance	4	Share best practices and lessons learned from other areas in initial stages
3.1.6 Diversity and equal opportunity	Included in ISO standards, and therefore strict adherence	Improvement in equitable treatment employees	4	Eliminate barriers to gender-specific recruitment
3.1.7 Local competence development	Increase in training and up-skilling costs arising from project implementatiom	Less persons being trained, or resistance to increasing training budget	4	Equip all levels of staff
3.2 Society and Customers				
3.2.1 Community support	Local stakeholders interested in implementing standard	Increase in partnership for implementation	4	Widespread communication engagement and awareness campaigns
3.2.2 Public policy compliance	Satisfying the National Development Goals and Manufacturing Framework 2025	Increase in partnership for implementation	4	Increase communication of project
3.2.3 Protection for indigenous and tribal peoples	Included in ISO standards, and therefore strict adherence	Improvement in equitable treatment of stakeholders	4	Increase communication of project
3.2.4 Customer health and safety	Included in ISO standards, and therefore strict adherence	Improvement in equitable treatment of customers	4	Increase communication of project
3.2.5 Product and service labeling	Included in ISO standards, and therefore strict adherence	Improvement in packaging standards	4	Increase communication of project
3.2.6 Market communications and advertising	Communication and Advertising supported from the National level	Stakholders are awareof the changes implemented under the project.	4	Increase communication of project
3.2.7 Customer privacy	Included in ISO standards, and therefore strict adherence	Adherence to data privacy laws	4	Increase communication of project
3.3 Human Rights				
3.3.1 Non-discrimination	Equitable treatement of staff	All staff understand the purpose of the project	4	Enforce the zero tolerance on non-discrimition behavior
3.3.2 Age-appropriate labor	Employees workng past retirement age	Incompliance with child labor laws	3	Ensure that employees past retirement are employed favorably
3.3.3 Voluntary labor	N/A	N/A	1	N/A
3.4 Ethical Behavior				
3.4.1 Procurement practices	Resources are within standard	Implementation in accordance with standard	4	Implement in accordance with standard
3.4.2 Anti-corruption	Compliance with ISO standards on quality and corruption	Investors and staff buy-in	3	Implement and share information with stakeholders
3.4.3 Fair competition	All business sizes are considered	Investors and staff buy-in	3	Engage with all businesses in the industry
		People Average	**3.7**	

Note: P5 Impacts Analysis, Adapted from (GPM Global, 2019) Chart, Own work

Figure 78: P5 Impacts Analysis – Planet (Environment) Impacts (GPM Global, 2019)

Impacts

This impact will improve the project's outcome(s) from a sustainability perspective.
5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree

Category / Subcategory / Element	Description (Cause)	Potential Impact	Impact Score Before	Proposed Response	Impact Score After	Change
4 Planet (Environmental) Impacts						
4.1 Transport						
4.1.1 Local procurement	Infrastructure is available internationally, and support is available locally	Local support available	3	Train more local ISO support officers	5	2
4.1.2 Digital communication	Maintenance of information in a shared place	Easy retrieval of information	3	Offer training on information software and its access	5	2
4.1.3 Traveling and commuting	Employees can work remotely	Increased productivity from employees	4	Increased productivity from employees	5	1
4.1.4 Logistics	Supplies can be sourced locally and internationally	Improvement in implementation time	4	Communicate schedule changes organization-wide	5	1
4.2 Energy						
4.2.1 Energy consumption	Reduce energy consumption by using energy efficient supplies and materials	Lower energy cost with minimal environmental impact	2	Implement energy efficient design practivies and investing in energy efficient materials, fixtures and supplies	5	3
4.2.2 CO2 emissions	Proper management of practices and procedures put in place to manage and reduce the carbon footprint from project activities.	Contributes to the health and safety of employees as well as help minimize the effects of natural disasters and slow down the process of climate change	3	Invest in alternative energy where energy can be reused and conserved simultaneously	4	1
4.2.3 Clean energy return	Implement processes to generate clean energy and secondary energy sources options.	Reduce the amount of fuel needed for electricity and reduction of green house gas emissions	2	Invest in an alternative energy source	4	2
4.2.4 Renewable energy	Implement natural practicies to generate renewable energy recourses throughout the project	Reduction in impact of climate change and less air and water pollution	2	Sustainable energy efficient practices as well as educating staff of the importance of energy efficiency within the office space	5	3
4.3 Land, Water, and Air						
4.3.1 Biological diversity	Consideration of living organisms within our eco-system throughout the lifecycle of the project	Healthy and productive eco system that is able to thrive in a resistant environment	4	Healthy environment that protects natural resources and utilizes them in a productive way	5	1
4.3.2 Water and air quality	Preservation of the impact on the water table and naturally flowing bodies of water in surrounding areas or in close proximity	Helps to preserve the natural elements and encourages design and planning around these elements	3	Integrated natural elements the project and improved air quality	5	2
4.3.3 Water consumption	Controlled and necessary use of water during construction phase as well as implementation of water peserving practicies	Lower environmental damage and reduce cost of water use on the project	3	Invest in grey water treatment and water saving practicies	5	2
4.3.4 Sanitary water displacement	The proper management and handling of water run off and grey water treatment	Reduction and revention of water related illnesses	3	Healthier staff where production can be maintained	5	2
4.4 Consumption						
4.4.1 Recycling and reuse	Implementation of waste minimizing policies and responsible use of materials	Protects the natural resources and reduce pollution	3	Utilization of reusable natural products and materials within the project and work space	5	2
4.4.2 Disposal	Enforce proper disposal practicies to reduce contamination and illness	Irresponsible disposal can cause contamination of the soil, air and water	3	Responsible and reliable disposal system that preserves the environment	5	2
4.4.3 Contamination and pollution	Utilization of eco friendly materials and products to reduce contaminants	Contamination of our eco system and increased sicknesses and diseases	3	Utilization of materials and products that do not contaminate the environment	5	2
4.4.4 Waste generation	Implement practicies that actively reuse and recycle products to reduce environmental impact	Attract unwanted pests and induce harmful bacteria and viruses	3	Encourage waste minization by promoting a circular economy withing the company	5	2
		Planet Average	**3.0**		**4.9**	**1.9**

Note: P5 Impacts Analysis, Adapted from (GPM Global, 2019) Chart, Own work

Figure 79: P5 Impacts Analysis – Prosperity (Economic) Impacts (GPM Global, 2019)

Impacts

This impact will improve the project's outcome(s) from a sustainability perspective.
5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree

Category / Subcategory / Element	Description (Cause)	Potential Impact	Impact Score Before	Proposed Response	Impact Score After	Change
5 Prosperity (Economic) Impacts						
5.1 Business Case Analysis						
5.1.1 Modeling and simulation	A physical, as well as Mathematical Modeling and Simulation done in order to show the Project Sponsors and Stakeholders, the potential viability of the product against any alternatives.	Provides the Project Sponsors and Stakeholders, with the reason why the Project/Product should be invested in.	4	Invest (buy-into) in Project	5	1
5.1.2 Present value	Assuming a discount rate of 6%, the Project's Present Value is USD$159,000.00 and its NPV is USD$80,000.00	Provides the stakeholders with financial proof that the project/product is favorable.	4	Buy-in to project	5	1
5.1.3 Direct financial benefits	Copletion within estimated budget of USD$159,000.00 Completion within scheduled time of 110 days Reduction in employee costs	Helps to secure future funding, should the Product seek to secure either private or public funding.	4	Implement project, instead of alternative	5	1
5.1.4 Return on investment	The Project has used the Cash Flow Return on Investment (CFROI), to look at its performance, considering inflation. The Project's CFROI is 17.72% which means a gain in the investment value of the project of USD$11,000.00	Proves to Investors that the Project/product can achieve financial sustainability	4	Maintain a positive ROI by communicating the strategic goals to the stakeholders, so each can play their part	5	1
5.1.5 Benefit-cost ratio	The Project's Cost Benefit Ratio is **1.00**. This means that the project is expected to deliver a positive net present value to a firm and its investors	The Project/Product will deliver positive returns to Investors, and enhance any future development proposals	4	Strive to control costs, by utilising/maintaining a proper spreadsheet, or reporting tool [project management software], that gives alerts and triggers signaling threshold performance limits.	5	1
5.1.6 Internal rate of return	At a rate of 6%, the project's IRR is USD$206,000.00 which indicates that the project will yield an annualized Return of over USD$41,000.00 and makes the project very lucrative.	The Project's IRR is higher than alternative investments, making it a better project.	4	Monitor project for IRR improvement over time	5	1
5.2 Business Agility						
5.2.1 Flexibility/optionality	Utilization of up to date [current] electronic infrastructure	May cost more financially in the short term May be difficult to implement	3	Implement technology In parts Maintain infrastructure to avoid repair and replacement costs	5	2
5.2.2 Business flexibility	Digitalization of capital reporting processes	Easier access to and retrieval of information	4	Introduction of state of the art technology processes within the manufacturing industry	5	1
5.3 Economic Stimulation						
5.3.1 Local economic impact	Increase in small and medium sized manufacturing business Increase in loans for manufacturing	Increase in employment Increase in production Growth in GDP	4	Promotion of Jamaica's Manufacturing industry globally	5	1
5.3.2 Indirect benefits	Advancing the cause for Regenerative and Sustainable Development Improvement of Jamaica's Ease of Doing Business global ranking	Expansion of the Manufacturing Sector Increase in Investments	4	Promote compliance with ISO 30414:2018	5	1
		Prosperity Average	**3.9**		**5.0**	**1.1**
		Overall Average	**3.5**		**4.4**	**0.8**

Note: P5 Impacts Analysis, Adapted from (GPM Global, 2019) Chart, Own work

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APPENDICES

Appendix 1: FGP Charter

CHARTER OF THE PROPOSED
FINAL GRADUATION PROJECT (FGP)

1. Student name

KERREEN ANDREA WILSON

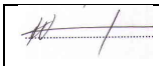
2. FGP name

Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow Compliance with ISO 30414:2018".

3. Application Area (Sector or activity)

MANUFACTURING

4. Student signature



5. Name of the Graduation Seminar facilitator

Roger Valverde Jimenez

6. Signature of the facilitator

7. Date of charter approval

8. Project start and finish date

JANUARY 09, 2023	JUNE 09, 2023

9. Research question

What elements must have a guide that allow the development of Human Resource Management systems that comply with International Organization for Standard (ISO)?

10. Research hypothesis

Is it possible to build a manual for enabling compliance with ISO 30414:2018: Human Resource Management — Guidelines for Internal and External Human Capital Reporting, for companies within the manufacturing sector in Jamaica?

11. General objective

General objectives states what the project expects to achieve in general terms. (open.edu, n.d.). The general objective of the project is detailed below:

General Objective

"To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018".

12. Specific objectives

Specific objectives are detailed objectives that describe what will be researched during the study, whereas the general objective is a much broader statement about what the study aims to achieve overall. Specific objectives break down the general objective into smaller, logically connected parts that systematically address the various aspects of the problem. (open.edu, n.d.). The Table below highlights the specific objectives for this particular project.

Specific Objectives

1. To develop a Project management Plan framed within the standards of the Project Management Institute "to document the processes, practices, inputs, tools and techniques" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.
2. To develop the Integration Management Plan "to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities" (Project Management Institute, 2017), that will

allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

3. To develop the Scope Management Plan "to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

4. To develop the Schedule Management Plan "to include the processes required to manage the timely completion" (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

5. To develop the Cost Management Plan "to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget.

6. To develop the Quality Management Plan "to include the processes for incorporating the industry's quality policy regarding planning, managing, and controlling project and product quality requirements" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder's expectations.

7. To develop the Resource Management Plan "to include the processes to identify, acquire and manage the resources needed to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018

8. To develop the Communications Management Plan to "include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

9. To develop the Risk Management Plan "to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

10. To develop the Procurement Management Plan "to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team" (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

11. To develop the Stakeholder Management Plan "to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact" (Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.
12. To develop a Project Management Plan framed within the standards of Regenerative Development that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

13. FGP Purpose or Justification

The justification is the part of a research project that sets out the reasons that motivated the research. The justification is the section that explains the importance and the reasons that led the researcher to carry out the work. (Exampleslab, n.d.) The Table below highlights the importance of this project, the expected benefits, and the timeline for completion.

Purpose or Justification

- There are no similar Project Management Plans that exist within the manufacturing industry in Jamaica that are designed to allow compliance with ISO 3014:2018
- The Manufacturing Sector represents a critical component of the Jamaican economy. Therefore, the implementation of Human Resource system guidelines will reduce administrative and processing costs, result in increased efficiencies, and improve the value-added knowledge gained from analytics while supporting the organization's (Industry's) principal business needs (Trading Economics, 2023)
- In 2020, Jamaica exported a total of $1.31B, making it the number 147 exporter in the world. During the last five reported years the exports of Jamaica have changed by -$103M from $1.42B in 2015 to $1.31B in 2020. The development of a Human Capital Reporting guideline for the Manufacturing Industry, will aid in better ease of doing business, and hence improvement in export revenues within the sector. (The Observatory of Economic Complexity (OEC), n.d.)

14. **Work Breakdown Structure**

The Work Breakdown Structure (WBS) is a foundational building block to initiating, planning, executing, and monitoring and controlling processes that are used to manage

projects. (Project Management Institute, 2017). Below is a Table describing the main deliverable as well as secondary, products or services to be created by the FGP.

Figure 80: FGP Work Breakdown Structure (Own Source)

1.0 ISO 30414:2018 Project Management Plan
1.1 Project Profile 1.1.1 Planning & Coordination Meeting
1.2 Research & Development 1.2.1 Review and Assessment of Industry Standards
1.3 Report on the Jamaican Manufacturing Industry 1.3.1 Report on the Human Resource (HR) and HR System Guidelines within Jamaica and Latin America and the Caribbean (LATAM) 1.3.2 Report of the Human Resource Capital reporting Standards 1.3.3 ISO 30414:2018 Standard reading and Analysis Report 1.3.4 Standard features required for Compliance with ISO 30414:2018 1.3.5 Report on Regenerative Development and the context of HR Development
1.4 Presentation of Results
2.0 Project Management Plan Profile 2.1 Introduction 2.1.1 Theoretical Framework 2.1.2 Methodological Framework 2.1.3 Preliminary Bibliographical Research 2.1.4 Annexes 2.1.4.1 Project Schedule 2.1.4.2 Project WBS 2.1.4.3 Project Charter
3.0 Project Management Plan 3.1 Project Integration Management Plan 3.2 Project Scope Management Plan 3.3 Project Schedule Management Plan 3.4 Project Cost Management Plan 3.5 Project Quality Management Plan 3.6 Project Resource Management Plan 3.7 Project Communications Management Plan 3.8 Project Risk Management Plan 3.9 Project Procurement Management Plan 3.10 Project Stakeholder Management Plan
4.0 Regenerative Development Framework 4.1 Report on Regenerative Development
5.0 Presentation of Results
6.0 Design Product Refinement
7.0 Conclusions 7.1 Recommendation Report 7.2 Final Report Preparation
8.0 Reference Lists
9.0 Annexes
10.0 Final Review Meeting 10.1 Final Presentation of Results
11.0 Delivery of Project Management Plan with Regenerative Component
12.0 Project Management Plan Approval
13.0 Project End

Note: Project Work Breakdown Structure (Own work)

15. FGP Budget

    The project budget details how much the project resources and various other factors will cost. Below is a Table detailing the estimated budget to develop the FGP.

Figure 81: FGP Budget (Own Work)

	EXPENDITURE TYPE	COST IN US DOLLARS
1	Planning & Coordination Meeting	$2,000.00
2	Research & Development (Review/Assessment of current Industry policies and standards)	$8,000.00
3	Presentation of Results (First Draft)	$2,000.00
4	First Review Meeting and Project Design Analyses	$3,000.00
5	Development of Project Management Plan	$10,000.00
6	Report on Regenerative Development	$20,000.00
7	Presentation of Results (Second Draft)	$5,000.00
8	Second Review Meeting and Design Product Refinement	$10,000.00
9	Recommendation Report	$30,000.00
10	Final Review Meeting and Report Preparation	$15,000.00
11	Final Presentation of Results – Delivery of Project Management Plan with Regenerative Component	$50,000.00
	Cost Estimate	**$155,000.00**
	Contingency Reserve (10%)	**$15,500.00**
	Management Reserve (5%)	**$7,750.00**
	Cost Baseline = Cost Estimate + Contingency Reserve	**$170,500.00**
	Project Budget = Cost Baseline + Management Reserve	**$178,250.00**

Note: Estimated Project Budget (Own source)

16. **FGP Planning and Development Assumptions**

    Assumptions are defined as, “a factor in the planning process that is considered to be true, real, or certain, without proof or demonstration” (Project Management Institute, 2017). The Table below shows the facts that are assumed for planning purposes for this Project.

Figure 82: FGP Assumptions (Own Work)

NO.	ASSUMPTIONS
1.	Information about the Manufacturing Industry in Jamaica is organized and available
2.	Information about the ISO 30414:2018 standard is organized and available
3.	Information on Human Resource Management Systems design is organized and available
4.	Project will be fully funded by the Sponsor
5.	All required permits and consents will be obtained from the relevant agencies/regulating authority
6.	There will be no natural disasters during the execution of the project
7.	All phases of the project will be completed on time and within budget
8.	The exchange rate will not increase above JMD$160 to USD$1
9.	Human Resource personnel and Subject Matter Experts (SMEs) will be available from within the Industry
10.	The project will be fully supported by all stakeholders
11.	The Project will be framed within the standards for Regenerative Development

Note: FGP Assumptions: 2023, Information taken from (Universidad Para La Cooperacion Internacional, 2015) Table: Own Work

17. FGP constraints

A Constraint is defined as, "A limiting factor that affects the execution of a project, program, portfolio, or process." (Project Management Institute, 2017) The Table below highlights the limiting factors which may impact this Research.

Figure 83: FGP Constraints (Own Work)

NO.	CONSTRAINTS
1.	The project must be completed by June 09, 2023
2.	Budget of US$155,000.00 would have to be strictly adhered to in order for project objectives to be realized
3.	Some Human Resource personnel within the Industry may resist this new standardization requirement
4.	Some key stakeholders may withhold or delay information
5.	Research cannot begin until the necessary agreements have been signed by Stakeholders

Note: FGP Constraints: 2023, Information taken from (Universidad Para La Cooperacion Internacional, 2015) Table: Own Work

18. FGP Development Risks

A risk is the potential of a situation or event to impact on the achievement of specific objectives. Risk can be perceived either positively (upside opportunities) or negatively (downside threats). (APM, n.d.) The Table below identifies the various root cause, risk events and impact for the project.

Figure 84: FGP Development Risks (Own Source)

DEVELOPMENT RISKS			
NO.	**CAUSE**	**RISK**	**CONSEQUENCE**
1	Change in the US dollar to Jamaican dollar exchange rate	Increase in budget costs Inadequate budget to complete the project	If the exchange rate changes such that the Jamaican dollar loses value against its US counterpart, this would result in requiring more JMD$ to purchase USD$1. For instance if the exchange rate goes above JMD$160 to USD$1, there may be delays in payment for deliverables, as a loan may have to be taken out to facilitate timely payments.
2	Legal barriers to access of important and relevant information	Delay of project Change in market conditions Regulatory project requirements	If some relevant information cannot be easily accessed due to regulatory or industry approvals, this may result in delay of the project.
3	Industrial actions or Organizational changes	Unavailability of key stakeholders	If there are organizational changes or Industrial actions, this may result in the unavailability of key stakeholders or Subject Matter Experts (SMEs) to supply relevant information
4	Poor Communication	Delay in Project delivery Lack of clarity in project goals	If poor communication exists among the Project Team, and Stakeholders, then there may be re-works necessary, leading to project delays
5	Unclear scope of work	Scope creep Schedule delays	The language and terms used in the Project Scope Statement is too vague Sponsor can request additional work outside of project scope

Note: FGP Development Risks: 2023, Information taken from (Universidad Para La Cooperacion Internacional, 2015) Table: Own Work

19. FGP main milestones

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

Figure 85: Milestones (Own Work)

ISO 30414:2018 PROJECT MILESTONE				
DELIVERABLE				FINISH ESTIMATED DATE
1	ISO 30414:2018 Project Management Plan			July 24, 2023
1.1		Project Profile		March 13, 2023
	1.1.1	Planning & Coordination Meeting		March 13, 2023
1.2		Research & Development		March 20, 2023
	1.2.1	Review & Assessment of Industry Standards		March 19, 2023
1.3		Report on the Jamaica Manufacturing Industry		March 22, 2023
	1.3.1	Report on the Human Resource (HR) and HR System Guidelines within Jamaica and the Caribbean (LATAM)		March 23, 2023
	1.3.2	Report on the Human Resource Capital Reporting standards		March 24, 2023
	1.3.3	ISO 30414:2018 Standards reading and analysis report		March 25, 2023
	1.3.4	Standard features required for compliance with ISO 30414:2018		March 26, 2023
	1.3.5	Report on Regenerative Development and the context of HR development		March 26, 2023
1.4		Presentation of Results		March 27, 2023
2	Project Management Plan Profile			April 24, 2023
	2.1	Introduction		April 03, 2023
	2.1.1	Theoretical Framework		April 10, 2023
	2.1.2	Methodological Framework		April 10, 2023
	2.1.3	Preliminary Bibliographical Research		April 17, 2023
	2.1.4	Annexes		April 24, 2023
		2.1.4.1	Project Schedule	April 18, 2023
		2.1.4.2	Project WBS	April 20, 2023
		2.1.4.3	Project Charter	April 24, 2023
3	Project Management Plan			May 29, 2023
	3.1	Project Integration Management Plan		May 01, 2023
	3.2	Project Scope Management Plan		May 05, 2023
	3.3	Project Schedule Management Plan		May 08, 2023
	3.4	Project Cost Management Plan		May 11, 2023
	3.4	Project Quality Management Plan		May 15, 2023
	3.6	Project Resource Management Plan		May 18, 2023
	3.7	Project Communications Management Plan		May 21, 2023
	3.8	Project Risk Management Plan		May 24, 2023
	3.9	Project Procurement Management Plan		May 27, 2023
	3.10	Project Stakeholder Management Plan		May 28, 2023
4	Regenerative Development Framework			June 05, 2023
	4.1	Report on Regenerative Development		June 04, 2023
5	Presentation of Results			June 05, 2023
6	Design Product Refinement			June 12, 2023
7	Conclusions			June 17, 2023
	7.1	Recommendation Report		June 19, 2023
	7.2	Final Report Preparation		June 23, 2023
8	Reference Lists			June 26, 2023
9	Annexes			June 27, 2023
10	Final Review Meeting			July 03, 2023
	10.1	Final Presentation of Results		July 10, 2023
11	Delivery of Project Management Plan with Regenerative Component			July 17, 2023
12	Project Management Plan Approval			July 24, 2023
13	Project End			July 24, 2023

Note: FGP Milestones: 2023, Information taken from (Universidad Para La Cooperacion Internacional, 2015) Table: Own Work

20 **Theoretical framework**

20.1 Estate of the “matter” (Own Work)

Figure 86: Estate of the “matter” (Own Work)

Estate of the Matter
For developing countries, the manufacturing sector offers the opportunity to re-balance the economy towards higher value-added sectors. “Manufacturing is important to Jamaica as the process of converting raw material into finished product through the application of technology, the employment of capital equipment, and the engagement of labour, delivers substantial economic value-add. Manufacturing, therefore, has a tremendous capacity to impact and sustain economic and employment growth”. (Mininstry of Finance and the Public Service, n.d.) Based upon its contribution to the Jamaican economy, it is important that the manufacturing industry achieve international standards of product and productivity through human capital reporting. This could be achieved by the development of a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018. The country is increasingly being recognised as a destination of choice for manufacturers looking to move facilities and sources of supply closer to end markets to better manage costs and localize their product offerings appropriately with greater speed, agility, and accuracy. With Jamaica being located at the hub of air and sea routes in the northern Caribbean, the country is ideally placed for export oriented, high value niche manufacturing and assembly operations, which represent a clear competitive advantage in today’s global marketplace. (Do Business Jamaica) In his Sectoral Speech on January 19, 2020, the Minister, The Honourable Nigel Clarke, Jamaica’s Minister of Finance and the Public Service, stated that, “the manufacturing sector of the economy has been experiencing the most robust and consistent period of growth of any period in at least 25 years. While Jamaica’s fiscal incentive regime does not prefer one sector over another, the GOJ is firmly of the view that Jamaica has great potential in manufacturing and this sector is strategically important for Jamaica’s growth and employment ambitions.” (Mininstry of Finance and the Public Service, n.d.) Whilst GDP from Manufacturing in Jamaica increased to 18,025 USD Million in the third quarter of 2022 from 17,327 USD Million in the second quarter of 2022 (Trading Economics, 2023), Minister Clarke also added that the manufacturing sector constitutes only 8.7 per cent of the economy and, as a result, its average quarterly growth of 2.2 per cent over the last four years has not been sufficient to substantially compensate for the variability in other areas of the economy. As such, the recent consistent positive performance of the manufacturing sector has largely gone unnoticed. This may be because we are still psychologically rooted in the traumatic experience of the gutting of Jamaica’s productive capacity over much of the past 25 years, beginning in the mid-1990s. One of the objective of ISO 30414:2018 Human Resource Management — Guidelines for Internal and External Human Capital Reporting is “to consider and to make transparent the human capital contribution to the organization in order to support sustainability of the workforce.” (ISO, n.d.). Improving Jamaica’s productive capacity can be achieved by applying the core Human Capital Reporting (HCR) areas under this standard of: Compliance and Ethics; Costs; Diversity; Leadership; Organizational Culture; Productivity; Recruitment, Mobility and Turnover; Skills and Capabilities; Succession Planning, and Workforce Availability. The International Organization for Standardization is an independent, non-governmental international organization comprising a membership base of over 160 national standards bodies, coordinated by the ISO Central Secretariat (ISO/CS) in Geneva, Switzerland. ISO and its members bring together a network of experts to share knowledge and develop International Standards.

Figure 87: Estate of the Matter Cont'd (Own Work)

Estate of the Matter
ISO standards support global trade, drive inclusive and equitable economic growth, advance innovation and promote health and safety to achieve a sustainable future. ISO provides a neutral platform, where tthrough its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market relevant International Standards that support innovation and provide solutions to global challenges. According to, (International Organization for Standardization, 2021), "the building of consensus across multiple levels establishes trust and credibility in our organization, and the International Standards we produce, that make us a global leader in our field. To realize our vision, we must develop consensus-based standards that are relevant and respond to current and future challenges. We must focus on getting the right standards to market at the right time, with the right content and in the right format". In accordance with its Jamaica Bureau of Standards (JBS) Certification Mark Programme, the Bureau of Standards Jamaica (BSJ), in the year, 2022, published its "Draft Jamaican Standard Guide for Human Resource Management – Guidelines for Internal and External Human Capital Reporting", titled JS ISO 30414: 2022, for a non-objection period: 14 August 2022 – 12 September 2022. (Bureau of Standards Jamaica, 2022). The JBS provides certification services for manufacturers participating in the programme and licensed to use the gazetted JBS Certification Marks to indicate conformity with Jamaican standards. (Bureau of Standards Jamaica, 2022). After the non-objection period, the BSJ then published the final 'adapted' standards 'FDJS ISO 30414: 2022', in October 2022, as part of its Standards Development Work Programme in order to meet the requirements specified in Annex 3 Code of Good Practice for the Preparation, Adoption and Application of Standards prepared by the World Trade Organization (WTO) in the Agreement on Technical Barriers to Trade (TBT). According to (Bureau of Standards Jamaica, 2022), The Work Programme contains a list and status of draft standards which are being developed/adopted/revised; classification of the drafts according to the International Classification for Standards (ICS); international standards considered in the development of the draft standards; and a list of standards published since the last publication of the Work Programme. Whilst, the BSJ has adopted and published the standards of ISO 30414:2022, there still exists a deficiency in the case of having a wholesome guide that in addition to listing the requirements of achieving ISO 3014:2022, would be able to guide organizations on how to achieve each objective, or apply the required metrics. This research paper proposes to address this issue by developing a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018. It is important to note that ISO 30414:2022 will replace the previously published ISO 30414:2018, and is now at the 'under development' stage, entitled, ISO/AWI 30414. In accordance with (Business Development Bank of Canada, n.d.), there are several steps to becoming ISO certified: (1) Development of a Management System; (2) Implementation of the System; (3) Verification of the Efficacy of the System; and (4) Registration of the System. Included in these four (4) steps, are the importance of identifying and documenting the business processes, ensuring that the identified processes and procedures are being followed, and creating effective reporting systems to monitor the objectives of the ISO certification. It has been observed that though several institutions tout the benefit of achieving ISO in Jamaica, documentation speaks only to what the Certification is and the core areas of focus. However, there are no detailed guide as to how these can be achieved, unless an external Consultant is hired. This Consultant however, would guide the organization through the process of becoming ISO certified, but not develop a project management plan that can guide all the stakeholders, and become a historical data and repository for lessons learned.

20.2 Basic conceptual framework

A conceptual framework is a synthetization of interrelated components and variables which help in solving a real-world problem. It is the final lens used for viewing the deductive resolution of an identified issue. The development of a conceptual framework begins with a deductive assumption that a problem exists, and the application of processes, procedures, functional approach, models, or theory may be used for problem resolution. (Applied Doctoral Center, 2023). Below is a list of the basic concepts utilized in the research:

Figure 88: Basic Conceptual Framework

Concepts	Definition
Adaptive Approach	A project life cycle that is iterative or incremental (Project Management Institute, 2017)
Assumptions	A factor in the planning process that is considered to be true, real, or certain, without proof or demonstration (Project Management Institute, 2017)
Bibliography	An APA format bibliography is an alphabetical listing of all sources that might be used to write an academic paper, essay, article, or research paper—particularly work that is covering psychology or psychology-related topics. APA format is the official style of the American Psychological Association (APA). This format is used by many psychology professors, students, and researchers. (Cherry, 2022)
Board of Examiner	The Examining Committee that approves the FGP, after presentation and defense by the Student. (Universidad Para La Cooperacion Internacional, 2015)
Bureau of Standards	The Bureau of Standards Jamaica is a statutory body established by The Standards Act of 1969 to promote and encourage standardization in relation to commodities, processes and practices. The Bureau's portfolio includes ensuring compliance with The Standards Act (1968), The Processed Food Act (1959) and the Weights and Measures Act (1976). Other aspects of its mandate are implemented under The Trade Act (1955), The Customs Act (1941), The Petroleum (Quality Control) Regulations (1990) and The CARICOM Regional Organization for Standards and Quality Act (2005). (Jamaica Information Service, n.d.)
Constraints	A limiting factor that affects the execution of a project, program, portfolio, or process (Project Management Institute, 2017)
Contract Worker	Contract workers, or independent contractors, are generally hired for specific projects or services on a shorter-term basis. Contract workers are not expected to be offered long-term employment or benefits. The requirements for classifying an employee as a contractor include: Responsible for their own taxes; Use their own equipment and supplies; Provide an invoice upon completion of work (Himber, 2022)
Deliverable	"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 Institute, 2017)
Employee	An employee is a worker hired by an employer to do a specific job. Employers control how employees are paid, when employees work, and how employees work. In exchange, employees get benefits that contractors don't. (Heathfield, 2022)
Estate of the Matter	The Background description and current status of the problem and research done about it. (Universidad Para La Cooperacion Internacional, 2015)
Final Graduation Project (FGP)	The Final Graduation Project (FGP) is a theoretical and practical activity characterized by the formulation of the diagnosis of a problem and the approach of a proposed solution to specific issues (Universidad Para La Cooperacion Internacional, 2015)
Human Capital	The term human capital refers to the economic value of a worker's experience and skills. Human capital includes assets like education, training, intelligence, skills, health, and other things employers value such as loyalty and punctuality. As such, it is an intangible asset or quality that isn't (and can't be) listed on a company's balance sheet. Human capital is perceived to increase productivity and thus profitability. The more investment a company makes in its employees, the chances of its productivity and success become higher. (Kenton, Human Capital Definition: Types, Examples, and Relationship to the Economy, 2022)
Human Capital Reporting (HCR)	Human Capital Reporting is reporting of valuation of human resource inside company, which usually consists intangible values. (ISO, n.d.)
Human Resource Management	Human Resource Management (HRM) is the practice of recruiting, hiring, deploying and managing an organization's employees. (ISO, n.d.)
Human Resource Management Systems	An HRMS, or human resources management system, is a suite of software applications used to manage human resources and related processes throughout the employee lifecycle. An HRMS enables a company to fully understand its workforce while staying compliant with changing tax laws and labor regulations (peoplegoal, 2021)
Hybrid Approach	A combination of two or more agile and non-agile elements, having a non-agile end result. (Project Management Institute, 2017)
Industry	An industry is a group of companies that are related based on their primary business activities. In modern economies, there are dozens of industry classifications. Industry classifications are typically grouped into larger categories called sectors. (Gorton, 2022)
International Organization for Standardization (ISO)	"ISO is an independent, non-governmental international organization with a membership of 167 national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market relevant International Standards that support innovation and provide solutions to global challenges. (International Organization for Standardization, 2021)
ISO 30414:2018	Human Resource Management — Guidelines for internal and external human capital reporting. This document provides guidelines for internal and external human capital reporting (HCR). The objective is to consider and to make transparent the human capital contribution to the organization in order to support sustainability of the workforce. This document is applicable to all organizations, regardless of the type, size, nature or complexity of the business, whether in the public, private or voluntary sector, or a not-for-profit organization. (ISO, n.d.)
ISO Compliance	ISO compliance is achieved when an organization meets the requirements outlined in a specific standard developed by the International Organization for Standardization (ISO). ISO has developed thousands of standards that cover all areas of business. These ISO frameworks are used by organizations to embed internationally standardized business practices. (Nyhuis, 2022)
ISO Standards	Standards are the distilled wisdom of people with expertise in their subject matter and who know the needs of the organizations they represent – people such as manufacturers, sellers, buyers, customers, trade associations, users or regulators. (ISO, n.d.)
Key Performance Indicator (KPI)	A key performance indicator (KPI) is a measurable value that demonstrates how effectively a company is achieving key business objectives. Organizations use KPIs to evaluate their progress and success at reaching targets. (Klipfolio, n.d.)

Note: Basic Conceptual Framework: 2023, Own Work

Figure 89: Basic Conceptual Framework (Own Work)

Concepts	Definition
Manufacture	The term manufacturing refers to the processing of raw materials or parts into finished goods through the use of tools, human labor, machinery, and chemical processing. (Kenton, Manufacturing: Definition, Types, Examples, and Use as Indicator, 2022)
Milestone	"A milestone is a significant point or event in a project. A milestone list identifies all project milestones and indicates whether the milestone is mandatory, such as those required by contract, or optional, such as those based on historical information. Milestones have zero duration because they represent a significant point or event." (Project Management Institute, 2017)
Mission Statement	A mission statement is a short action-based declaration that describes the purpose of an organization. Mission statements explain what companies do and are a very important part of their culture, along with the core values and vision statement. Mission statements are an internal guide for organizations, but they also need to be appealing to customers. (Westland, 2022)
Objective	Something toward which work is to be directed, a strategic position to be attained, a purpose to be achieved, a result to be obtained, a product to be produced, or a service to be performed. (Project Management Institute, 2017)
Organizational Structure	An organizational structure that has many levels, a rigid reporting structure, and substantial bureaucracy frequently uses a predictive approach. Projects that use adaptive methods tend to have a flat structure and may operate with self-organizing project teams. (Project Management Institute, 2021)
Portfolio	These are: Projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives. (Project Management Institute, 2017)
Predictive Approach	" A form of project life cycle in which the project scope, time, and cost are determined in the early phases of the life cycle" (Project Management Institute, 2017)
Program	Related projects, subsidiary programs, and program activities that are managed in a coordinated manner to obtain benefits not available from managing them individually. (Project Management Institute, 2017)
Project	A temporary endeavor undertaken to create a unique product, service, or result. (Project Management Institute, 2017)
Project Communications Management Plan	Project Communications Management includes the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and ultimate disposition of project information. (Project Management Institute, 2017)
Project Cost Management Plan	Project Cost Management includes the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so the project can be completed within the approved budget. (Project Management Institute, 2017)
Project Integration Management Plan	Project Integration Management includes the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups. (Project Management Institute, 2017)
Project Life Cycle	The series of phases that a project passes through from its start to its completion. (Project Management Institute, 2017)
Project Procurement Management Plan	Project Procurement Management includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team. (Project Management Institute, 2017)
Project Quality Management Plan	Project Quality Management includes the processes for incorporating the organization's quality policy regarding planning, managing, and controlling project and product quality requirements, in order to meet stakeholders' expectations. (Project Management Institute, 2017)
Project Resource Management Plan	Project Resource Management includes the processes to identify, acquire, and manage the resources needed for the successful completion of the project. (Project Management Institute, 2017)
Project Risk Management Plan	Project Risk Management includes the processes of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk on a project. (Project Management Institute, 2017)
Project Schedule Management Plan	Project Schedule Management includes the processes required to manage the timely completion of the project. (Project Management Institute, 2017)
Project Scope Management Plan	Project Scope Management includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. (Project Management Institute, 2017)
Project Stakeholder Management Plan	Project Stakeholder Management includes the processes required to identify the people, groups, or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively. (Project Management Institute, 2017)
Regenerative Development	Regenerative development is the use of resources to improve society's wellbeing in a way that builds the capacity of the support systems needed for future growth. What sustainable development is to traditional economic development, regenerative development is to sustainable development. (Gabel, 2015)
Research Methodology	Your research methodology discusses and explains the data collection and analysis methods you used in your research. A key part of your thesis, dissertation, or research paper, the methodology chapter explains what you did and how you did it, allowing readers to evaluate the reliability and validity of your research and your dissertation topic. (McCombes & George, 2022)
Scope Creep	The uncontrolled expansion to product or project scope without adjustments to time, cost, and resources. (Project Management Institute, 2017)
Standards Development Work Programme	The BSJ's Standards Development Work Programme is published in order to meet the requirements specified in Annex 3 Code of Good Practice for the Preparation, Adoption and Application of Standards prepared by the World Trade Organization (WTO) in the Agreement on Technical Barriers to Trade (TBT). It was first published in April 1996 and is published twice each year, in April and October. (Bureau of Standards Jamaica, 2022)
Sustainable Development	The use of resources to improve society's wellbeing in a way that does not destroy or undermine the support systems needed for future growth. (Gabel, 2015)
Theoretical Framework	A theoretical framework is a foundational review of existing theories that serves as a roadmap for developing the arguments you will use in your own work. (Vinz, 2022)
Tools	Something tangible, such as a template or software program, used in performing an activity to produce a product or result. (Project Management Institute, 2021)
Vision Statement	It is essential that everyone is aware of the project Vision and Objectives. The Vision and Objectives are communicated throughout the Project. This includes referencing the intended outcomes when the project team is engaged in making decisions and solving problems. (Project Management Institute, 2021)
Work Breakdown Structure (WBS)	The WBS is a foundational building block to initiating, planning, executing, and monitoring and controlling processes that are used to manage projects.
Workforce	The people engaged in or available for work, either in a country or area or in a particular firm or industry. (Oxford Dictionary, n.d.)
Workforce Management	Workforce management (WFM) is the way in which employers strategically allocate people and resources, track attendance and comply with constantly changing workplace laws and regulations. Ultimately, the objectives are to optimize productivity and reduce risk. (ADPM, 2023)
Workforce Productivity	The World Bank Group works in every major area of development. We provide a wide array of financial products and technical assistance, and we help countries share and apply innovative knowledge and solutions to the challenges they face. (Hubstaff, 2023)
World Bank	The World Bank Group works in every major area of development. We provide a wide array of financial products and technical assistance, and we help countries share and apply innovative knowledge and solutions to the challenges they face. (World Bank, n.d.)

Note: Basic Conceptual Framework: 2023, Own Work

21. **Methodological framework**

Methodology refers to 'the principles underlying particular research approaches, as distinct from "methods", which are ways of collecting data'. Methodology determines a method for researchers to produce data for analysis. (Oxford University Press). The following displays the Methodological Framework for the Research.

Figure 90: Methodological Framework (Own Work)

METHODOLOGICAL FRAMEWORK					
Objective	**Name of Deliverable**	**Information Sources**	**Research Method**	**Tools**	**Restrictions**
To develop a **Project Management Plan** framed within the standards of the Project Management Institute "to document the processes, practices, inputs, tools and techniques" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance	Project Management Plan "to document the processes, practices, inputs, tools and techniques" that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Government Document** **Secondary: Text Book**	**Quantitative Methods:** Secondary Data Collection and Analysis **Qualitative Method**: Workshops Literature Review **Mixed Methods**: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic
To develop the **Integration Management Plan** "to include the processes and activities to identify, define, combine, unify and coordinate the various processes and project management activities" (Project Management Institute, 2017), that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	Integration Management Plan that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Regulatory Standards and Regulations; Government Document:** Secondary: Text Book	**Quantitative Methods:** Secondary Data Collection and Analysis **Qualitative Method**: Workshops Literature Review **Mixed Methods**: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic
To develop the **Scope Management Plan** "to include the processes required to ensure the project includes all the work required, and only the work required to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	Scope Management Plan that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Government Document** **Secondary: Text Book**	**Quantitative Methods:** Secondary Data Collection and Analysis **Qualitative Method**: Workshops Literature Review **Mixed Methods**: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic
To develop the **Schedule Management Plan** "to include the processes required to manage the timely completion" (Project Management Institute, 2017), of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	Schedule Management Plan that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Journalistic Report** **Secondary: Text Book**	**Quantitative Methods:** Secondary Data Collection and Analysis **Qualitative Method**: Workshops Literature Review **Mixed Methods**: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic
To develop the **Cost Management Plan** "to include the processes involved in planning, estimating, budgeting, financing, funding, managing and controlling costs" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 can be completed within the approved budget.	Cost Management Plan that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Government Document; Financial Report** **Secondary: Text Book**	**Quantitative Methods** Secondary Data Collection and Analysis Qualitative Method: Workshops Literature Review Mixed Methods: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic
To develop the **Quality Management Plan** "to include the processes for incorporating the industry's quality policy regarding planning, managing, and controlling project and product quality requirements" (Project Management Institute, 2017), so that the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018 meet stakeholder's expectations.	Quality Management Plan that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Standards and Regulations** **Secondary: Text Book**	**Quantitative Methods:** Secondary Data Collection and Analysis **Qualitative Method**: Workshops Literature Review **Mixed Methods**: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic

Note: Methodological Framework: 2023, Own Work

Figure 91: Methodological Framework (Own Work)

METHODOLOGICAL FRAMEWORK					
Objective	**Name of Deliverable**	**Information Sources**	**Research Method**	**Tools**	**Restrictions**
To develop the **Resource Management Plan** "to include the processes to identify, acquire and manage the resources needed to successfully complete" (Project Management Institute, 2017) the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018	Resource Management Plan that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Dictionary** **Secondary: Text Book**	**Quantitative Methods:** Secondary Data Collection and Analysis **Qualitative Method**: Workshops Literature Review **Mixed Methods**: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic
To develop the **Communications Management Plan** to "include the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring and the ultimate disposal" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	Communications Management Plan that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Government Document** **Secondary: Text Book**	**Quantitative Methods** Secondary Data Collection and Analysis Qualitative Method: Workshops Literature Review Mixed Methods: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic
To develop the **Risk Management Plan** "to include the processes of conducting risk management planning, identification, analysis, response planning, response implementation and risk monitoring" (Project Management Institute, 2017) of the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	Risk Management Plan that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Journal Report** **Secondary: text Book**	**Quantitative Methods:** Secondary Data Collection and Analysis **Qualitative Method**: Workshops Literature Review **Mixed Methods**: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic
To develop the **Procurement Management Plan** "to include the processes necessary to purchase and/or acquire products, services, or results needed from outside the project team" (Project Management Institute, 2017) for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	Procurement Management Plan that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Government Website** **Secondary: Text Book**	**Quantitative Methods:** Secondary Data Collection and Analysis **Qualitative Method**: Workshops Literature Review **Mixed Methods**: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic
To develop the **Stakeholder Management Plan** "to include the processes required to identify the people, groups, or organizations that could impact or be impacted by, to analyze stakeholder expectations and their impact" (Project Management Institute, 2017) on the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.	Stakeholder Management Plan that will allow the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Government Website** **Secondary: Text Book**	**Quantitative Methods:** Secondary Data Collection and Analysis **Qualitative Method**: Workshops Literature Review **Mixed Methods**: Explanatory Sequential Design Combination Research	**Primary: Website Articles;** **Existing Data** **Secondary: Text Book**	Availability and reliability of data Few research on the topic
To develop a Project Management Plan framed within the standards of **Regenerative Development** that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	Regenerative Development Report that allows the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.	**Primary: Journal, University Website** **Secondary: Text Book**	**Quantitative Methods:** Secondary Data Collection and Analysis **Qualitative Method**: Workshops Literature Review **Mixed Methods**: Explanatory Sequential Design Combination Research	**Existing Data: Research Journals** Gabel, M. (2015). Regenerative Development: Going Beyond Sustainability. Kosmo Journal.	Availability and reliability of data Few research on the topic

Note: Methodological Framework: 2023, Own Work

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

Regenerative development is the use of resources to improve society's wellbeing in a way that builds the capacity of the support systems needed for future growth. What sustainable development is to traditional economic development, regenerative development is to sustainable development. (Gabel, Regenerative Development: Going Beyond Sustainability, 2015). The design of this project ensured that there was alignment to regenerative development standards.

The general objective of the project was, "To develop a Project Management Plan for the Development of Human Resource Management System Guidelines in the Manufacturing Sector that allow its Compliance with ISO 30414:2018", with the specific objective being, to develop this Project Management Plan framed within the standards of Regenerative Development that will allow the Development of sustainable Human Resource Management System Guidelines in the Manufacturing Sector that allow compliance with ISO 30414:2018.

The concept of sustainability has been gaining importance and influencing the development of an approach towards employees referred to as Sustainable Human Resource Management (SHRM: Human Capital Report: Industry Manufacturing). This project, in providing the project management plan that validates the regenerative development component, will have a positive effect on the manufacturing industry in Jamaica, while fulfilling the sustainable development goals: 3, 4, 5, 8, 9 and 10.

Often, sustainability measures are added onto projects for overarching accountability and reporting purposes, typically to hit general sustainability strategic goals or compliances. However, these overarching sustainability measures often fail to accurately capture the everyday impacts of

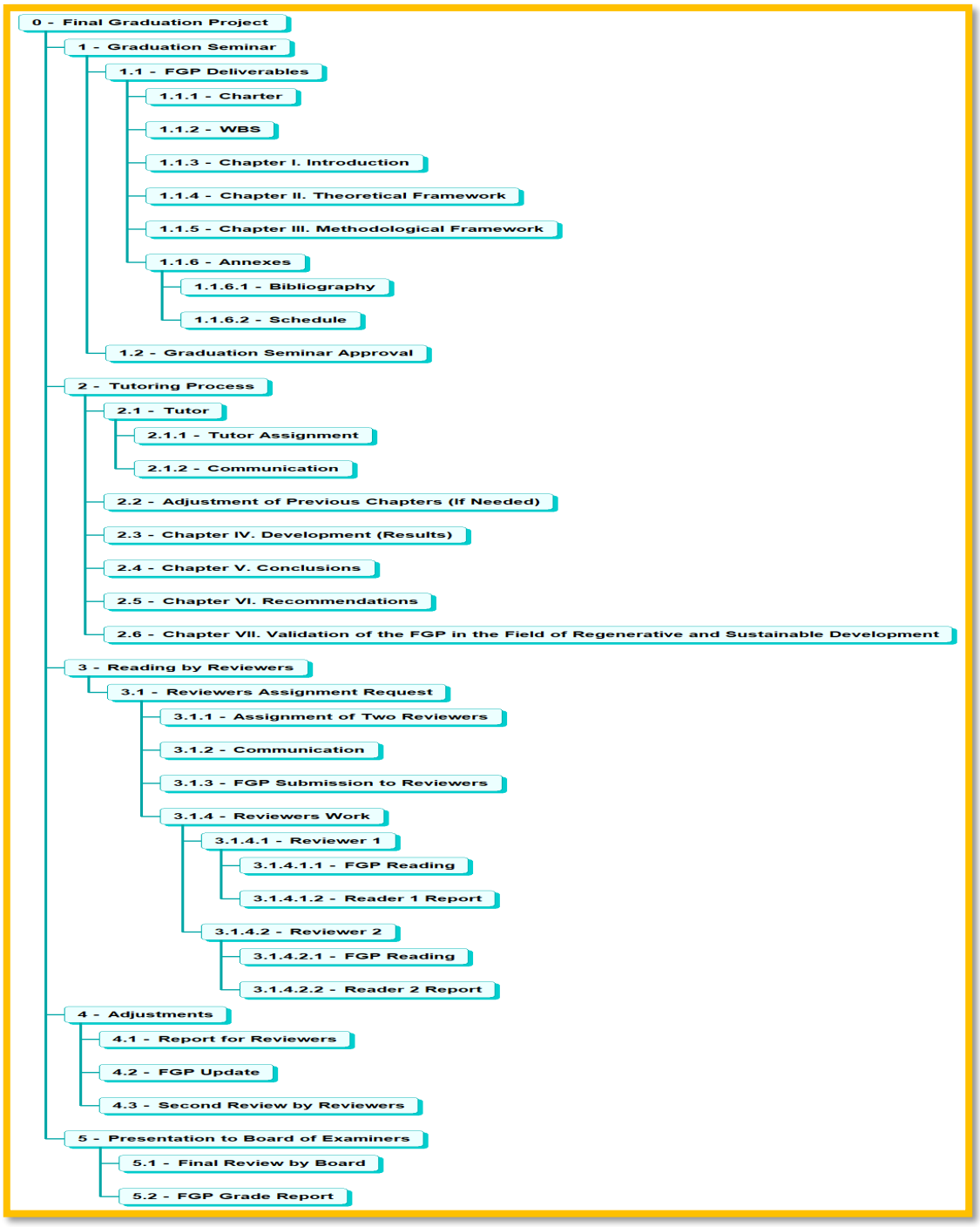
everyday project management activities and only provide organizations with generalized understandings of their sustainability impacts. (Adel, 2021). In measuring the impact of the project on regenerative and sustainable development, the P5 Impacts Analysis is used.

The P5 Standard supports the alignment of projects with organizational goals for sustainability by focusing on the potential impacts of the project's activities, results, and outcomes. (GPM Global, 2019). The P5 standards expand on the traditional sustainable project management focus on the triple bottom line, also known as the 3Ps (people, planet, profits), to consider five elements – Project, Process, People, Planet and Prosperity. These standards aim to combine project management goals with the UN Sustainable Development Goals and accurately capture the holistic impact of projects and/or products throughout their entire lifespan, along with service activities. By incorporating social and environmental objectives into each project, organizations can better track and monitor their sustainability activities on a project level which helps easily identify areas for improvements. This also allows organizations to provide greater levels of accountability and transparency than portfolio-wide sustainability goals. In the chart below, we show the areas of impact analysis measured by P5. (Adel, 2021)

The impact Analysis for this project, yields that (1) Product and Process average was 3.6, with an impact if 4.6; People average was 3.7, with an impact of 3.6; (3) Planet Average was 3.0, with an impact of 4.9; and prosperity average was 3.9, with an impact of 5.0. The overall P5 average was 3.4, with an impact of 4.4.

Appendix 2: FGP WBS (Own Work)

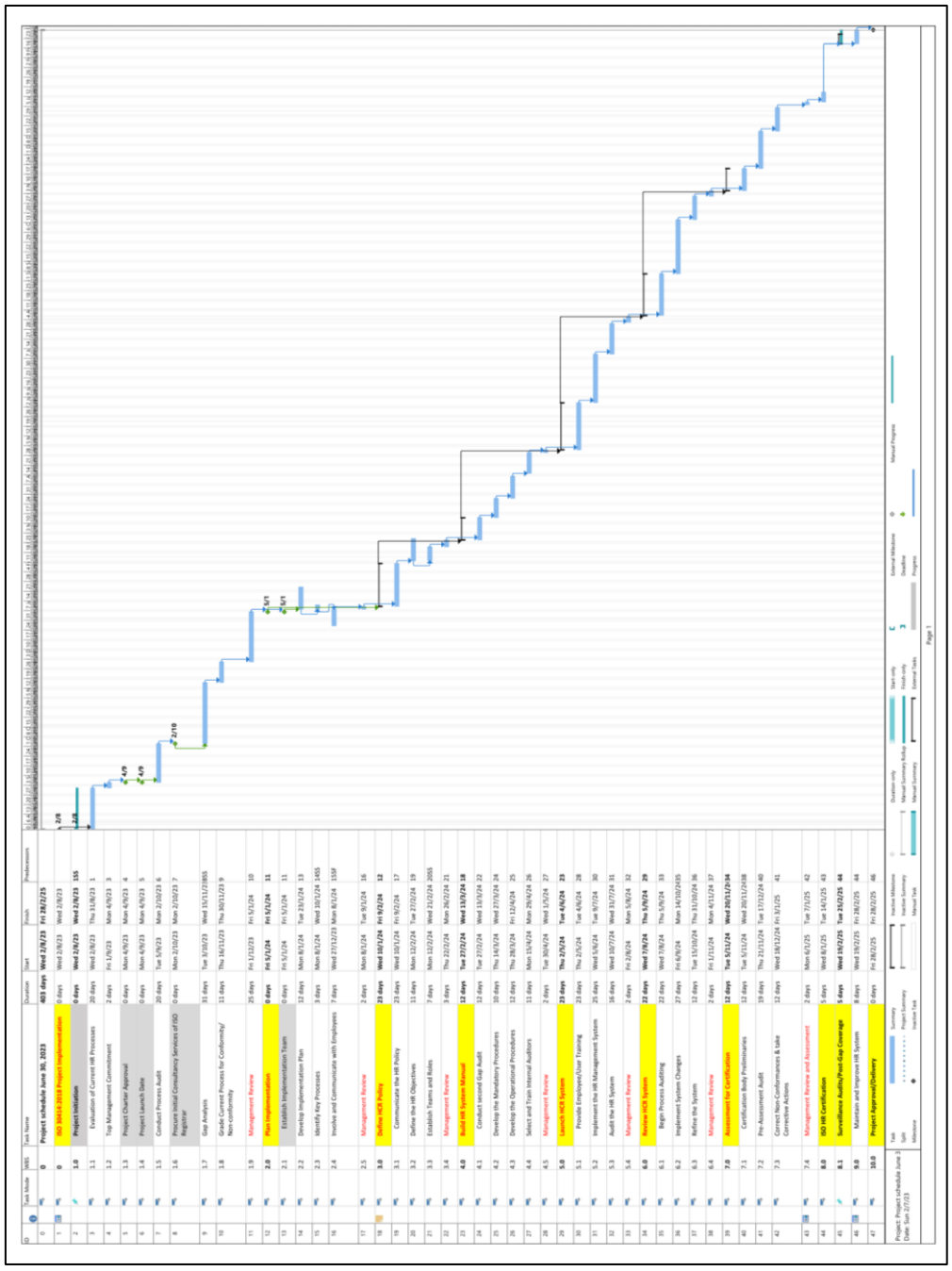
Figure 92: FGP WBS (Own Work)



Note: FGP Work Breakdown Structure, information taken from (Universidad Para La Cooperacion Internacional, 2015): 2023, Own Work

Appendix 3: FGP Schedule (Microsoft Projects, 2020)

Figure 93: FGP Schedule (Microsoft Projects, 2020)



Note: FGP Schedule, 2023. Done in Microsoft Projects

Appendix 4: Preliminary Bibliographical Research

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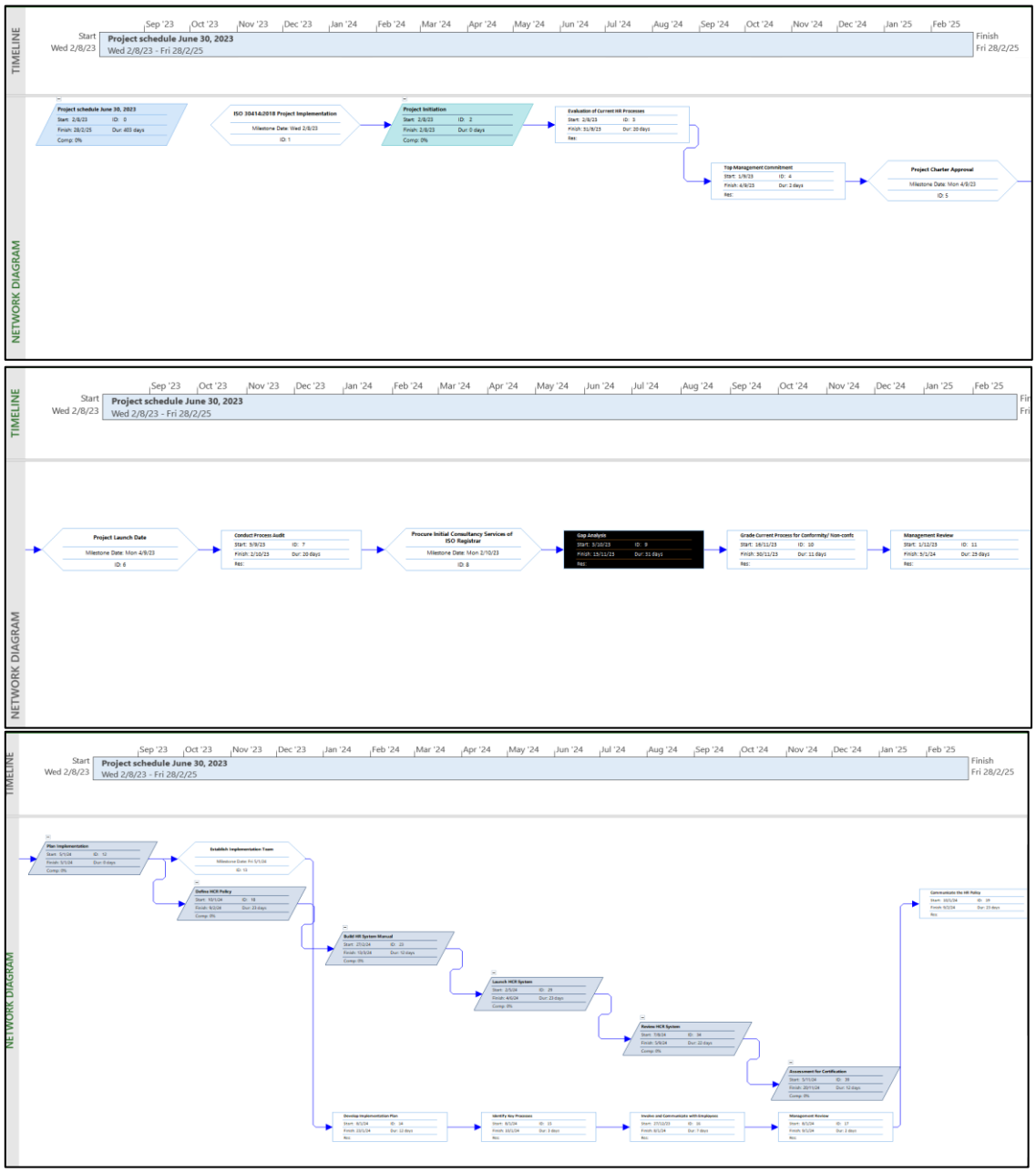
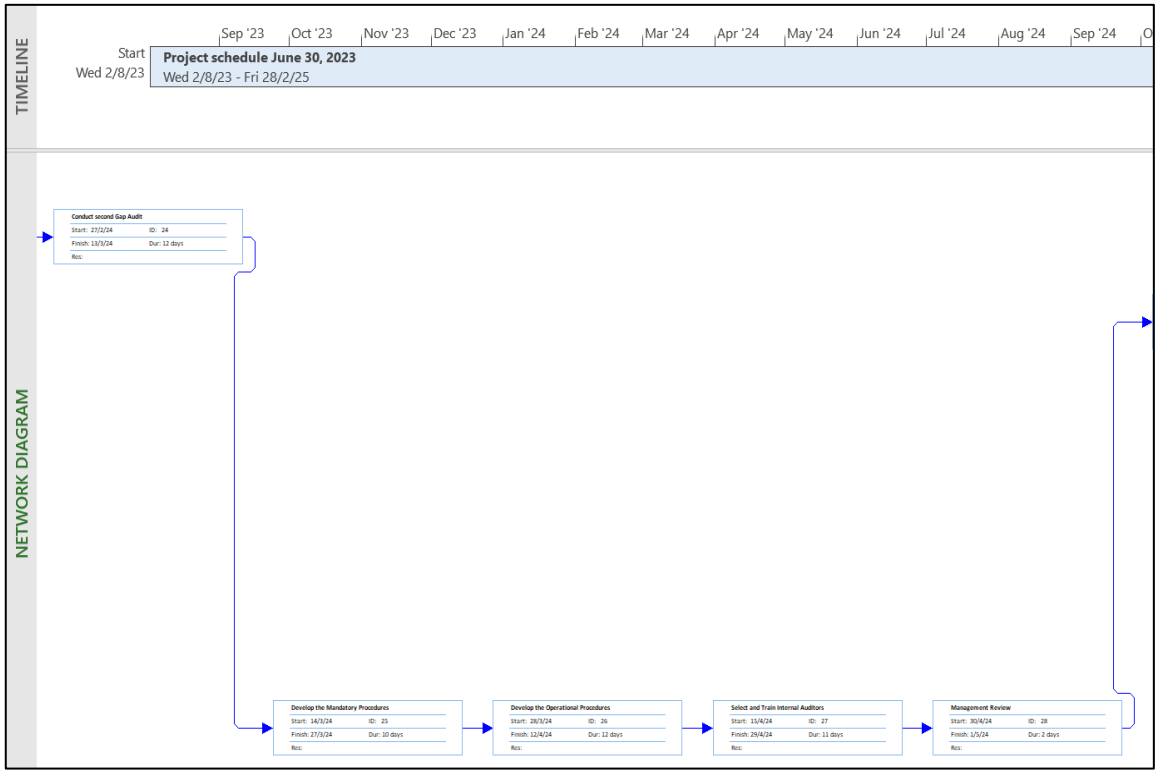
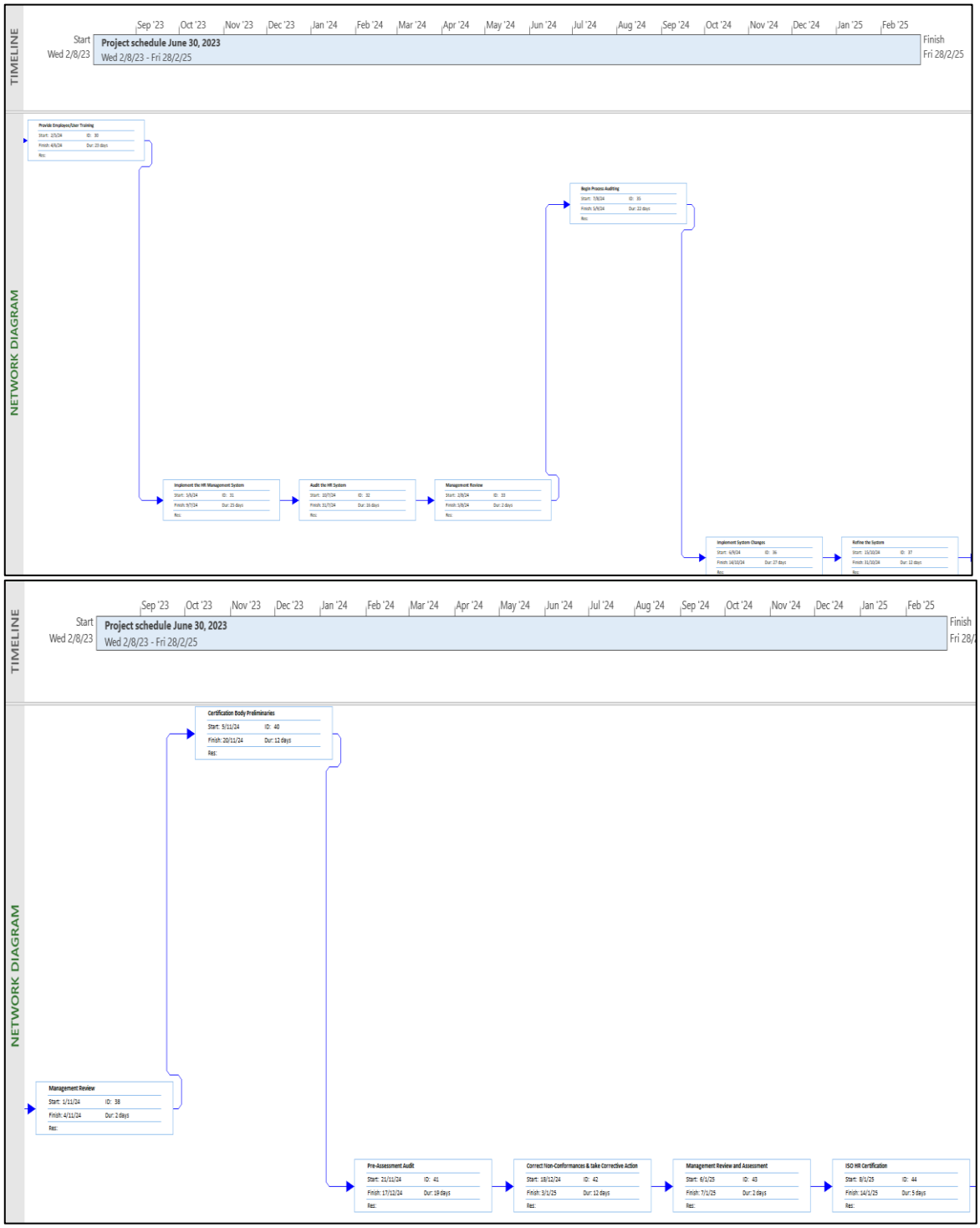
Appendix 5: Other relevant information

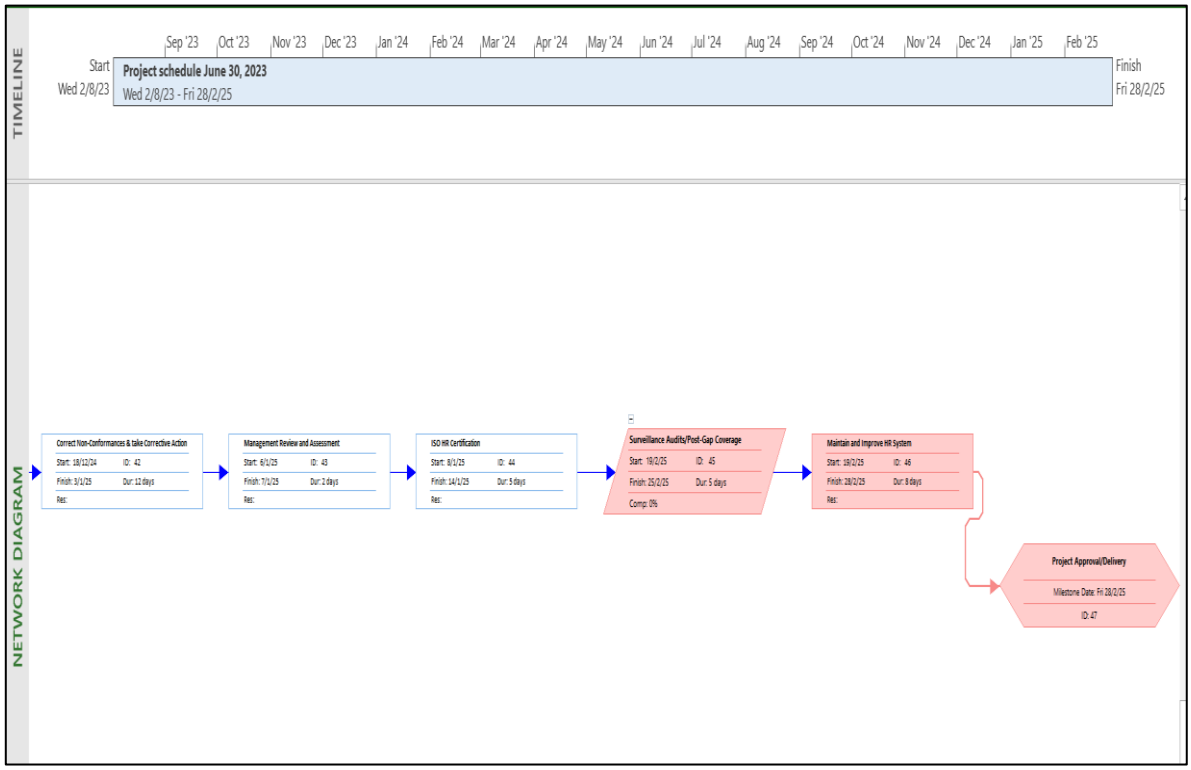
Chart 52: Schedule Network Diagram




TIMELINE
Sep '23
Oct '23
Nov '23
Dec '23
Jan '24
Feb '24
Mar '24
Apr '24
May '24
Jun '24
Start
Wed 2/8/23
Project schedule June 30, 2023
Wed 2/8/23 - Fri 28/2/25
NETWORK DIAGRAM
Communicate the HR Policy
Start: 10/1/24 ID: 19
Finish: 9/2/24 Dur: 23 days
Res:
Define the HR Objectives
Start: 12/2/24 ID: 20
Finish: 27/2/24 Dur: 11 days
Res:
Establish Teams and Roles
Start: 12/2/24 ID: 21
Finish: 21/2/24 Dur: 7 days
Res:
Management Review
Start: 22/2/24 ID: 22
Finish: 26/2/24 Dur: 3 days
Res:


TIMELINE
Sep '23
Oct '23
Nov '23
Dec '23
Jan '24
Feb '24
Mar '24
Apr '24
May '24
Jun '24
Jul '24
Aug '24
Sep '24
Start
Wed 2/8/23
Project schedule June 30, 2023
Wed 2/8/23 - Fri 28/2/25
NETWORK DIAGRAM
Conduct second Gap Audit
Start: 27/2/24 ID: 24
Finish: 13/3/24 Dur: 12 days
Res:
Develop the Mandatory Procedures
Start: 14/3/24 ID: 25
Finish: 27/3/24 Dur: 10 days
Res:
Develop the Operational Procedures
Start: 28/3/24 ID: 26
Finish: 12/4/24 Dur: 12 days
Res:
Select and Train Internal Auditors
Start: 15/4/24 ID: 27
Finish: 29/4/24 Dur: 11 days
Res:
Management Review
Start: 30/4/24 ID: 28
Finish: 1/5/24 Dur: 2 days
Res:


TIMELINE
Sep '23
Oct '23
Nov '23
Dec '23
Jan '24
Feb '24
Mar '24
Apr '24
May '24
Jun '24
Jul '24
Aug '24
Sep '24
Oct '24
Nov '24
Dec '24
Jan '25
Feb '25
Start
Wed 2/8/23
Project schedule June 30, 2023
Wed 2/8/23 - Fri 28/2/25
Finish
Fri 28/2/25
NETWORK DIAGRAM
Provide Employee/User Training
Start: 2/5/24 ID: 30
Finish: 4/6/24 Dur: 23 days
Res:
Implement the HR Management System
Start: 5/6/24 ID: 31
Finish: 9/7/24 Dur: 15 days
Res:
Audit the HR System
Start: 10/7/24 ID: 32
Finish: 31/7/24 Dur: 16 days
Res:
Management Review
Start: 2/8/24 ID: 33
Finish: 3/8/24 Dur: 2 days
Res:
Begin Process Auditing
Start: 7/8/24 ID: 35
Finish: 5/9/24 Dur: 22 days
Res:
Implement System Changes
Start: 6/9/24 ID: 36
Finish: 14/10/24 Dur: 27 days
Res:
Refine the System
Start: 15/10/24 ID: 37
Finish: 31/10/24 Dur: 12 days
Res:
TIMELINE
Sep '23
Oct '23
Nov '23
Dec '23
Jan '24
Feb '24
Mar '24
Apr '24
May '24
Jun '24
Jul '24
Aug '24
Sep '24
Oct '24
Nov '24
Dec '24
Jan '25
Feb '25
Start
Wed 2/8/23
Project schedule June 30, 2023
Wed 2/8/23 - Fri 28/2/25
NETWORK DIAGRAM
Certification Body Preliminaries
Start: 5/11/24 ID: 40
Finish: 20/11/24 Dur: 12 days
Res:
Management Review
Start: 1/11/24 ID: 38
Finish: 4/11/24 Dur: 2 days
Res:
Pre-Assessment Audit
Start: 21/11/24 ID: 41
Finish: 17/12/24 Dur: 19 days
Res:
Correct Non-Conformances & take Corrective Action
Start: 18/12/24 ID: 42
Finish: 3/1/25 Dur: 12 days
Res:
Management Review and Assessment
Start: 6/1/25 ID: 43
Finish: 7/1/25 Dur: 2 days
Res:
ISO HR Certification
Start: 8/1/25 ID: 44
Finish: 14/1/25 Dur: 5 days
Res:



Note: Project Schedule Network, Created in Microsoft Projects (Own work)

Chart 53: Request for Proposal

RFP Process, Criteria, Terms and Conditions (ISO, 2022)

Enquiries
Except as planned below for clarification calls, any query necessary for the preparation of the response must be addressed in writing by e-mail to the ISO Project Manager at the contact details below, and copying the ISO Procurement Manager at tenders@promg.com , or as otherwise directly notified by the ISO Procurement Manager.

Contact: Kerreen Wilson Title: ISO Project Manager
Address: Villa Marketplace, Jamaica, West Indies Email: kerreen.wilson@promg.com

Modifications
No officer, agent or employee of PRO MANAGEMENT LLC is authorized to alter orally, any portion of these documents. During the period prior to the submission of information, any clarification or additions will be issued in the form of written addenda distributed by PRO MANAGEMENT LLC. Information submitted shall be final and may not be altered by subsequent offers, discussions or commitments unless the respondent is requested to do so by the ISO Procurement Manager in written form.

Schedule and Deadlines
The project will follow the dates below:
Chart 54: Procurement Schedule and Deadlines

Activity	Due Date
RFP released to Service providers	30 August 2023
Clarification calls with Service providers (as requested)	09 September 2023
Service providers return proposal	16 September 2023 12:00 CET
Expected evaluation of proposals (including references)	23 September 2023
Interviews of shortlisted candidates	30 September 2023
Expected selection of proposal	07 October 2023

Electronic format of all proposals must be received by 16 September 2023 12:00 PM CET by the Procurement Manager at at tenders@promg.com , copying the ISO Project Manager. Proposals not received by this time without prior written agreement will be disqualified.

These dates are a guide to the time frame expected for this project. Dates may change and the ISO Project Manager will advise of any changes.

Format of Submission
Your response should be structured in accordance with the requirements contained in the RFP and should align with each requirement of the RFP by cross-reference to the relevant section number.
Service providers are encouraged to supply innovative solutions in responding to this RFP, however, Service providers must strictly adhere, at all times, to the requirements of this RFP. You should include any additional supporting information or alternative proposals as a separate section titled “Alternative Options”.

Response Deadline
Submissions are due as set in the paragraph 1.3 above, provided however that, if the deadline set for submission is extended, the ISO Project Manager will also specify the new date and hour for submission which will replace the above deadline.
Any submission received by PRO MANAGEMENT LLC after expiry of the deadline referred above will not be considered.

Partial Responses
Partial proposals not meeting the requirements specified in this RFP will not be considered.

Clarification on RFP
The Service providers should direct any questions arising during the preparation of the response to this RFP, or requests for clarification, in writing by e-mail to the ISO Project Manager, and copying the ISO Procurement Manager.
We have planned for clarification calls. Please contact the ISO Project Manager to arrange timing. Where appropriate, PRO MANAGEMENT LLC reserves the right to circulate questions and the answers thereto to all other Service provider or post these publicly at www.isopromg.com, without disclosing the source of the questions or revealing the substance of a proposal.

Validity
The content and pricing of the submission must remain valid for 6 months from the date of submission.

Evaluation Process and Criteria
Preliminary screening and requirements
The initial stage will examine whether the proposal submitters have provided all the required information and/or associated documents on a prima facie basis. In addition, the preliminary examination of the following elements shall be on a pass/fail basis:
The Service provider must confirm that it accepts full responsibility for arranging, such life, health, accident and other forms of insurance covering the performance any agreement

granted under this RFP. The Service provider (including any personnel) is not eligible to participate in life or health insurance schemes available to PRO MANAGEMENT LLC employees. The Service provider is also required to confirm that they are solely responsible for their tax status, paying any taxes and statutory contributions applicable in respect of fees and reimbursements received. For individual Service Providers residing in Jamaica who seek to be engaged directly, you must provide a copy of your National Insurance Scheme (NIS) certificate demonstrating your independent contractor status in your proposal documentation.

Evaluation criteria

In evaluating the complete proposals received, PRO MANAGEMENT LLC will seek the most appropriate offer based on the following weighted criteria. The evaluation will be based on a scoring system as shown in the table below.

Chart 55: Procurement Evaluation Criteria

Criteria	Weight	Section #
Proposal description, including virtual interviews with shortlisted proposers	30%	4.1
Experience with similar studies	20%	4.2
Implementation plan	20%	4.3
Company profile and personnel	20%	4.4
Financial proposal	10%	4.5
Total	100%	

Based on these criteria, the 3 proposals with the highest scoring will be short-listed and the submitters will be invited to present their proposal during a virtual interview with the ISO Project Manager and members of the evaluation committee. The evaluation of the virtual interview will be considered as part of the final scoring.

Pre-award Review and Validation

The evaluation committee as led by the Project Manager will score each proposal. The ISO Procurement Manager shall ensure the validation of compliance to the ISO Procurement Policy in this RFP process leading to the selection of the successful Service provider.

Health and Safety

The Service provider is expected to follow legislative health and safety directives, as dictated by the appropriate country.

General Conditions

By submitting a proposal, the Service provider agrees to all conditions and terms stated in this RFP. If the Service provider does not agree with particular terms, such terms must be discussed in detail with the ISO Project Manager before a proposal is submitted.

The working language for all communications is English.

Except for this RFP and otherwise public information, information or communications obtained in relation to this RFP (including clarification calls) may not be released without the express written consent of ISO.

By responding to this RFP, applicants agree that the decision of PRO MANAGEMENT LLC is final and binding, including any decision to withdraw this RFP or disqualify any proposal. PRO MANAGEMENT LLC shall not in any way be responsible for any costs incurred in the preparation and presentation of the Service provider's information and proposal.

PRO MANAGEMENT LLC reserves the right to negotiate all terms and conditions in order to enter a formal contract with the Service provider, including regarding ultimate pricing. The ultimate decision regarding the awarding of a bid is subject to said negotiation. Inability to accept any required contractual term from PRO MANAGEMENT LLC can result in disqualification of a proposal, without regard to any prior communication, shortlisting or process. This RFP document, the Service provider's response and, written addenda may form part of the contract.

PRO MANAGEMENT LLC is not bound to give any reason for rejecting any responses or part thereof.

Unsolicited telephone calls or visits to PRO MANAGEMENT LLC or PRO MANAGEMENT LLC staff during the RFP process to obtain proposal status information are prohibited and may result in the Service provider being disqualified from the application process. News releases pertaining to this RFP or the award of any contract related to this RFP may not be made without the prior written permission of PRO MANAGEMENT LLC.

All work and materials shall comply with all applicable laws, notably but not restricted to antitrust and other laws regulating competition that protect fair competition by prohibiting anti-competitive behaviour, of provincial and federal nature, municipal ordinances, regulations, and directions of inspectors appointed by proper authorities having jurisdiction, as the case may be. Where proof of certifications is required by PRO MANAGEMENT LLC, the Service provider shall make all such certificates available for inspection.

The Service provider shall at all times act impartially and shall refrain from any relationship which would compromise its independence or that of its personnel. If the Service provider

fails to maintain independence, PRO MANAGEMENT LLC on the basis of its sole discretion reserves the right immediately disqualify the application. The Service provider shall include a conflict of interest statement in its proposal.

Disclaimer
This RFP and its attachments contain all information the Service provider may require preparing a proposal as requested by PRO MANAGEMENT LLC.

The Service provider is advised that if confirmation or clarification of the contents or any further information is required, it should contact the ISO Project Manager, copying the ISO Procurement Manager by e-mail at tenders@promg.com.

The acceptance of a submission to this RFP is not to be construed as representing or creating any binding obligation on PRO MANAGEMENT LLC to enter into any legal commitment whatsoever. Furthermore, in responding to this RFP, the Service provider is deemed to specifically acknowledge the following:

Notwithstanding any representation by or on behalf of PRO MANAGEMENT LLC or any estimate of quantities by PRO MANAGEMENT LLC shown in this RFP or otherwise given to the Service provider (now or in the future) ISO shall be under no obligation to purchase any particular quantity of products or services, except as otherwise formally agreed in with written and signed contractual agreement.

The Service provider places no reliance on any such representation or estimates and will place no reliance upon any future representation or estimate that may be provided unless that representation or estimate is noted in the written and signed contractual agreement.

Chart 56: Sample Contract for ISO Project

CONTRACT # XXX

CONTRACT FOR PROFESSIONAL SERVICES FOR THE GOVERNMEMNT OF JAMAICA - ISO PROJECT FOR THE MINISTRY OF INDUSTRY, INVESTMENT AND COMMERCE, JAMAICA

THIS AGREEMENT is made this _____ day of TWO THOUSAND and TWENTY-THREE, **SELECTED ISO CONSULTANT**., hereafter referred to as the Contractor, of the one part and **PRO MANAGEMENT LLC** hereafter referred to as the Client, representing the Government of Jamaica (GOJ) located at Villa Marketplace, Jamaica, have agreed to enter into this CONTRACT FOR PROFESSIONAL SERVICES and will be governed by the following clauses:
NOW IT IS HEREBY AGREED AS FOLLOWS:

FIRST CLAUSE: OBJECT
The object of this agreement is to implement a systems manual for enabling compliance with ISO 30414:2018: Human Resource Management — Guidelines for Internal and External Human Capital Reporting, for companies within the manufacturing sector in Jamaica.

SECOND CLAUSE: CONTRACTOR'S OBLIGATIONS
The Contractor must present monthly reports detailing the results or observations obtained in each completed stage and any other issues not indicated in this Contract, but are related to the project execution.
The Contractor guarantees that they will fully comply with this Contract, using in their work, experience, knowledge, techniques and logistics necessary to the highest levels and quality standards.

THIRD CLAUSE: CLIENT'S OBLIGATIONS
The Client will ensure that all information required by the Contractor from the Client in order to carry out the necessary duties, are provided. The Client will appoint a liaison from the project team, to work closely with the Contractor in performance of the Contract.

FOURTH CLAUSE: TERM AND TERMINATION
The **CONTRACTOR** will provide Professional services under this agreement for the period of _____ months commencing 2023. This agreement shall continue for a period of _____ months from the start date and will be subject to a re-negotiation and re-evaluation process at least sixty (60) days between **THE CLIENT** and the **CONTRACTOR** prior to the end of

the _____ months period unless and until determined in accordance with Clauses 2.4, 3.2 and/or 6.2 herein.

Either party may terminate the agreement by giving the other party ninety (90) days written Notice of its intention to terminate. Provided that in the event that **THE CLIENT** gives the **CONTRACTOR** written notice that it is dissatisfied with the **CONTRACTOR**'s service and requests that the **CONTRACTOR** remedies the dissatisfaction, and the **CONTRACTOR** fails to remedy the situation within sixty (60) days of receipt of the said notice, **THE CLIENT** shall be entitled to terminate this Agreement forthwith on the expiry of the sixty (60) days period.

Upon termination of this Agreement the **CONTRACTOR** and/or the servants or agents of the **CONTRACTOR** shall forthwith remove personnel, any apparatus and supplies, which it may have placed at the location for purposes of the provision of the services.

FIFTH CLAUSE: FEES

THE CLIENT shall pay the **CONTRACTOR** a monthly fee, plus a Management Fee together with the applicable General Consumption Tax of 16.5% which Cost Summary conditions are hereinafter included as Annex 2. Payment shall be made net of thirty (30) days upon the submission of a detailed invoice provided by the **CONTRACTOR**.

If any monthly sum hereby agreed to be paid by **THE CLIENT** to the **CONTARCTOR** or any part thereof remains unpaid for a period of forty-five (45) days, a late payment charge of 3% above the average interest charge on overdraft facility at the **CONTRACTOR**'s bank may be added by the **CONTRACTOR** from the date the amounts became due and payable, until payment.

Alternately, the **CONTARCTOR** may give to **THE CLIENT** notice to terminate this Agreement and unless such sum shall have been paid before the expiration of such period specified in the notice, this Agreement shall upon such expiration terminate absolutely and the **CONTRACTOR**'s obligation herein shall cease but without prejudice to the liability of the owner in respect of such or any other breach.

All related invoices will be provided by the **CONTRACTOR** in JMD$ dollars. The **CONTRACTOR** shall give **THE CLIENT** written notice of all other expenses over and beyond the fixed rates herein, which said expenses **THE CLIENT** agrees to pay in the event **THE CLIENT** makes no objection in writing within fourteen (14) days receipt of the notice. Except this Agreement is renewed, payments shall not be increased without the giving of SIXTY (60) days prior notice of such increase and shall be the subject of mutual agreement.

SIXTH CLAUSE: NATURE OF THE RELATIONSHIP

This service does not create any employment relationship.

SEVENTH CLAUSE: CONFIDENTIALITY

The **CONTRACTOR** agrees to use its best endeavours to ensure that at no time during or after the term of this agreement it shall divulge or allow to be divulged to any person or the media any confidential or sensitive information relating to the business of affairs of **THE CLIENT** and the **CONTRACTOR** shall ensure that all its employees, servants and/or agents are bound by such obligation of confidentiality before, during and after the termination of their employment.

EIGHTH CLAUSE: ASSIGNABILITY

Neither party shall assign transfer, sub-contract or in any other manner make over to any third party the benefit and/or burden of this Agreement without the prior written consent of the other, which consent shall not be unreasonably withheld.

NINTH CLAUSE: MODIFICATIONS OF THE CONTRACT

If circumstances arise which necessitate modification and/or extension of the Agreement, such modification shall be made by mutual consent in writing by both parties to this Agreement.

TENTH CLAUSE: INDEMNIFICATION

Except for clause 1.9 herein, the **CONTRACTOR** accepts liability for and shall indemnify **THE CLIENT** against any liability, claims, proceedings, expenses or loss in respect of the personal injury or death of any person and/or in respect of damage to any property whatsoever belonging to **THE CLIENT**., where such injury, death or damage is caused, directly or indirectly, by the negligence of the employees/personnel supplied by the **CONTRACTOR**, where such negligence has arisen or arises directly in connection with the carrying out of their duties under this Agreement.

The **CONTRACTOR** undertakes and agrees to take out adequate insurance cover against all liability the **CONTRACTOR** may incur for the personal injury, death and/or damage to property arising herein. Furthermore, the **CONTRACTOR** agrees to defend (including but not limited to paying Attorney's fees) and maintain **THE CLIENT** harmless from any claim of any employee/personnel directly or indirectly related to such employee/personnel's employment contract with the CONTRACTOR. The **CONTRACTOR** hereby agrees that it has sole responsibility to comply with all the obligations arising from its contract with the employee/personnel.

ELEVENTH CLAUSE: INSURANCE

The **CONTRACTOR** shall take out and maintain insurance coverage with an insurance company as follows:

(a) A policy indemnifying the **CONTRACTOR** and **THE CLIENT** against all risks under public liability sum of up to Twenty Million Jamaican Dollars (JMDS20, 000,000.00) on any

one claim and shall submit proof of such coverage upon request by **THE CLIENT.**

TWELFTH CLAUSE: FORCE MAJEURE

Force Majeure is any event which the **CONTRACTOR** could not foresee and/or reasonably provide against which prevents the **CONTRACTOR** from wholly or partly performing any duties under this Agreement. Force Majeure shall include but not be limited to any of the following:

1. Hurricane, flood, earthquake or any other natural disaster
2. War, revolution, insurrection or hostilities (whether declared or not)
3. Riot, civil commotion or civil uprising
4. Epidemics
5. Any fire of major proportions or explosions
6. Strike, lockout or other industrial disturbances
    a. Upon the occurrence of any event constituting Force Majeure, the **CONTRACTOR** or **THE CLIENT** shall serve each other written notice of the occurrence including a statement describing the effect of such occurrence on the performance of this Agreement.
    b. In the event of Force Majeure the **CONTRACTOR** unless otherwise directed by **THE CLIENT** shall continue to undertake and perform duties set forth in this Agreement as far possible or reasonably practicable.
    c. If prevented from so performing by such case, performance or services may be suspended during the continuance of such inability, and such inability shall be removed if practicable with all reasonable dispatch.

Where the failure or suspension of performance continues for a period exceeding four (4) weeks, either party may serve upon the other notice in writing of its intention forthwith to terminate this Agreement unless performance recommences before the expiration of fourteen (14) days of the date of that notice and unless performance shall have commenced accordingly, this Agreement shall absolutely determine upon the expiration of the fourteen (14) days.

No party to this Agreement shall be liable to the other by reason of any failure in, or the suspension of, performance under this Agreement in accordance with its terms if such failure or suspension arises out of events of Force Majeure originating after the effective date which are beyond the control and without the fault or negligence of the disabled party, and which such party could not reasonably anticipate through the exercise of due care and normal business judgment.

THIRTEENTH CLAUSE: DISPUTE SETTLEMENT

If at any time any dispute or difference whatsoever shall arise between the **CONTRACTOR** and **THE CLIENT** in relation to or in connection with this Agreement, the parties shall attempt to settle such dispute by negotiation, before resorting to arbitration.

FOURTEENTH CLAUSE: ARBITRATION

Subject to the provision of Clause 8.1, claims and disputes arising out of each and in relation to this Agreement or to a breach of it including its interpretation, performance or termination that the parties are unable to resolve within seven (7) days after written notice by a party to the other, shall be finally settled by arbitration. The dispute, controversy or claim may be submitted to arbitration by any party after giving the other party three (3) days prior written notice to do so.

The Arbitrator shall be selected by mutual agreement of the parties within five (5) days after the commencement of such arbitration and shall have experience and expertise in the matter which is the subject of the Arbitration. If the Parties cannot reach agreement on the Arbitration within such five (5) day period, the Arbitrator shall be appointed by the President of the Jamaica Bar Association. The findings of the Arbitrator shall be final and binding upon the Parties with respect to the matter referred to Arbitration.

Notwithstanding the foregoing, any party may initiate litigation to prevent expiration of relevant statute of limitations or otherwise to preserve its rights to equitable or other remedies.

FIFTEENTH CLAUSE: JURISDICTION

The Agreement shall be governed and construed in accordance with the laws of Jamaica.

SIXTEENTH CLAUSE: ADDRESS FOR RECEIVING COMMUNICATION

Any notice under this Agreement shall be served on the parties at their addresses herein given or at such other address as may be specified by them for the purpose. All notices shall be in writing and may be either hand-delivered, or sent by registered mail. Notices shall be deemed given forty-eight (48) hours after the registered mailing thereof, or where hand-delivered, upon the delivery thereof. This method of communicating notice shall not be exclusive and notice may be delivered by hand-delivery or facsimile transmission, in which cases the notices so delivered shall be deemed to be received by the party to whom it is directed when it is actually received.

SEVENTEENTH CLAUSE: SEVERANCE

If any provision of this Agreement is found by any court or administrative body of competent

jurisdiction to be invalid or unenforceable then such invalidity or unenforceability shall not affect the other provisions of this Agreement which shall remain in full force and effect. The parties agree to attempt to substitute for any invalid or unenforceable provision a valid or enforceable provision which achieves to the greatest extent possible the same effect as would have been achieved by the invalid or unenforceable provision.

EIGHTEENTH CLAUSE: ACCEPTANCE

IN WITNESS WHEREOF the parties hereto have hereunto set their hands the day and year first hereinbefore written.

Signed on behalf of **THE CLIENT**)
by:) _____
)
In the presence of:)
_____

Signed on behalf of **PRO MANAGEMENT LLC** by)
_____
) Kerreen Wilson, ISO Project Manager
In the presence of:)
_____

Figure 94: Philological Dictum

THE UNIVERSITY OF THE WEST INDIES
OPEN CAMPUS
ACADEMIC PROGRAMMING AND DELIVERY DIVISION
The University of the West Indies, Jamaica
Telephone: +49 162 170 8964
Email: andre.sherriah@open.uwi.edu

June 2, 2023
Academic Adviser
Masters Degree in Project Management (MPM)
Universidad para la Cooperacion Internacional (UCI)

Dear Academic Adviser

Re: Miss Kerreen Wilson

I hereby confirm that Miss Kerreen Wilson has made the recommended corrections to her Final Graduation Project. Consequently, the document should now meet the scholarly and linguistic standards expected of a student for a degree at the Master's level.

Sincerely,

Dr André Sherriah

Course Coordinator/Instructor (Adjunct Staff)

Programme Delivery Department