PROJECT MANAGEMENT OVERVIEW (MARCO)

This section ensures that all efforts for the implementation of countermeasures to secure the system are in line with the stakeholder’s expectations in term of costs, time and quality controls. In addition, it offers a clear work break down task and sub-task structure. The project management implementation methodology covers the key knowledge of the following areas:

* Communication to ensure that all people involved on the process are communicating effectively
* Costs in order to managing the financial resources in the more efficient way as possible
* Human resources to allocate tasks and workforce effectively
* Integration to implement measurements an allocate tasks in an efficient way
* Quality to ensure deliverables’ condition specification
* Risk to minimise theoccurrence and severity of identified risks
* Scope that outlines what need to be done
* Stakeholders to preserve and maintain relations to every ne participating in the project
* Time to allocate tasks and workflow

## Implement methodology: PMBoK

|  |  |  |
| --- | --- | --- |
| Key Knowledge Areas | Focus | Processes |
| Communication | Ensure that all people involved on the project communicating effectively. | Develop a communication plan that allows distribution of project information and new task assignments |
| Cost | Managing the financial resources dedicated to the project | Allocate costs of financial effort for each implementation |
| Human resources | Managing the work force committed to the project | Allocate workers to tasks, develop training programs |
| Integration | Define the steps to the implementation of new measurements | Developing, planning, and executing project change control |
| Quality | Ensure the quality standards set for the projects ISO 27000 | Measuring the deliverables against the quality specification |
| Risk | minimise the occurrence and severity of identified risks and monitor and control risks in the future | Identify, isolate, eliminate and control risks |
| Scope | Identification of what needs to be done | Identifying management intent |
| Stakeholders | Identify and maintain relation with entities involve on the project | Planning stakeholders’ management |
| Time | Value the time and effort | Work breaks down estimate resources |

### Work Brake Down (WBD)

The WBD can be seen from the table below this covers tasks, subtasks, time, skills, resources as well as costs and dependency.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Ref. | Tasks | Effort (hours) | Skill | Dependency |
| 1 | Recover your business systems after cyber security incidents | 56 | Network Architect, security engineer | 0 |
| 2 | Backup important information | 24 | Hard Drive Data Recovery Specialists | 1 |
| 3 | device and software update | 46 | Software engineer | 2 |
| 4 | strong passwords set up | 8 | System administrator | 3 |
| 5 | Secure the data storage processing and transmission | 20 | Network architect | 3 |
| 6 | Implement effective firewall | 32 | Network Architect | 3 |
| 7 | multi-factor authentication Implementation | 8/16 | Network administrator | 3 |
| 8 | Limit access to your devices, systems and applications | 36 | Network expert | 4 |
| 9 | Provide cyber security training | 40 | Cyber security administrator | 5 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Tasks or sub task | Resources | Start(S) & end (E) date | Estimated effort in hours | Estimated Capital Expenses | Dependencies | Responsible Person |
| 1 | Initial phase |  |  |  |  |  |
| 1.1 | Risk assessment | 10/7/2022 | 56 | $5000 | 0 | Risk Assessment Team |
| 1.1.2 | Assets identification | 15/7/2022 | 48 | $3000 | 0 | Risk Assessment Team |
| 1.1.3 | Weighted Factor Analysis (WFA) | 16/7/2022 | 36 | $2500 | 1 | Risk Assessment Team |
| 1.1.4 | Risk Identification | 17/7/2022 | 36 | $2500 | 2 | Risk Assessment Team |
| 1.1.5 | Risk Register | 18/7/2022 | 36 | $2500 | 3 | Risk Assessment Team |
| 2 | Planning Phase |  |  |  |  |  |
| 2.1 | Delegate Tasks | 20/7/2022 | 5 | $300 | 1 | Management team |
| 2.2 | Develop a Work Break Structure(WBD) | 21/7/2022 | 15 | $2000 | 2 | Project Management Team |
| 2.3 | Define methodology (PMBoK) | 22/7/2022 | 4 | $300 | 0 | Project Management Team |
| 2.3.1 | Define communication method | 22/7/2022 | 4 | $400 | 0 | Project Management Team |
| 2.3.2 | Cost and budget estimation | 23/7/2022 | 8 | $500 | 4 | Project Management Team |
| 2.3.3 | Define quality standards | 24/7/2022 | 4 | $400 | 5 | Security Implementation Team |
| 2.3.4 | Research current policy and laws | 25/7/2022 | 12 | $700 | 0 | Security Policy & Compliance Team |
| 2.3.5 | Research controls | 26/7/2022 | 12 | $700 | 0 | Security Implementation Team |
| 3 | Execution Phase |  |  |  |  |  |
| 3.1 | Ensure a secure data storage processing and transmission | 27/72022 | 200 | $14000 | 6 | Network security architect |
| 3.1.1 | update e-mail and system encryption | 27/72022 | 36 | $3000 | 6 | Cyber security engineer |
| 3.1.2 | Implement effective firewall | 29/72022 | 56 | $5000 | 6 | Network security architect |
| 3.1.3 | device and software update | 1/9/2022 | 36 | $3000 | 6 | Software engineer |
| 3.1.4 | Embrace multi-factor authentication | 4/9/2022 | 36 | $3000 | 6 | System administrator |
| 3.1.4.1 | configure Microsoft Office 360 | 4/9/2022 | 8 | $2500 | 7 | System administrator |
| 3.2 | define criteria to access to company devices, systems and applications | 5/9/2022 | 8 | $1000 | 8 | Security Implementation Team |
| 3.2.1 | Enforce strong password | 6/9/2022 | 12 | $1050 |  | System administrator |
| 3.2.2 | Define privilege on the system | 7/9/2022 | 20 | $2000 |  | System administrator |
| 3.2.3 | Limit access to physical designed areas | 8/9/2022 | 56 | $30000 |  | Security Implementation Team |
| 4 | Control phase |  |  |  |  |  |
| 4.1 | Access controls | 12/9/2022 | 190 | $20000 |  |  |
| 4.1.2 | Review existing controls | 12/9/2022 | 12 | $2000 |  |  |
| 4.1.3 | Review existing best practice | 13/9/2022 | 8 | $1500 |  |  |
| 4.1.4 | Develop frameworks | 14/9/2022 | 78 | $13000 |  |  |
| 4.1.5 | framework implementation | 22/9/2022 | 56 | $5000 |  |  |
| 4.1.6 | Develop supportive policy | 30/9/2022 | 36 | $3000 |  |  |
| 4.2 | Awareness and Training | 1/10/2022 | ????? | ????? |  |  |
| 4.2.1 | Design and develop security training program |  |  |  |  |  |
| 4.3 | Physical and Environmental Protection |  |  |  |  |  |
| 4.3.1 | Evaluate areas that needs protection in place |  |  |  |  |  |
| 4.3.2 | Security door and CCTV camera installation |  |  |  |  |  |
| 4.4 | Contingency plan |  |  |  |  |  |
| 4.4.1 | Recovery plan cyber threats |  |  |  |  |  |
| 4.4.2 | Recovery plan natural disaster |  |  |  |  |  |
| 4.4.3 | Recovery plan in case of theft |  |  |  |  |  |
| 5 | Close phase |  |  |  |  |  |
| 5.1 | review new controls |  |  |  |  |  |
| 5.2 | Testing systems |  |  |  |  |  |
| 5.3 | Enforce new policy |  |  |  |  |  |
| 5.4 | Delegate roles and responsibility |  |  |  |  |  |

The WBS breakdown the project into 5 phases in a hierarchical structure which showing subdivision of tasks required to achieve the main objective such as the security plan for JOHN DOUGH PIZZATM IT system. In fact, the WBS outlines the end objectives subdivided by smaller and more manageable tasks and the

The WBS is a tool that allows the project to be displayed in a hierarchical structure, The main objective is subdivided into smaller tasks in term of volume, length and responsibility. As it can be seen from the table project will be completed in approximately three months from the starting date which will be the 10th of July and the total cost is approximately $210.000. the initial phase is to identify, categorise assets risks and control.

WBS is a categorised and incremental breakdown of the project into phases, c, and work packages. It is a [tree structure](https://en.wikipedia.org/wiki/Tree_structure), which shows a subdivision of effort required to achieve an objective, for example, a [program](https://en.wikipedia.org/wiki/Program_management), [project](https://en.wikipedia.org/wiki/Project), and [contract](https://en.wikipedia.org/wiki/Contract).[[4]](https://en.wikipedia.org/wiki/Work_breakdown_structure#cite_note-NASA01-4) In a project or contract, the WBS is developed by starting with the end objective and successively subdividing it into manageable components in terms of size, duration, and responsibility (e.g., systems, subsystems, components, [tasks](https://en.wikipedia.org/wiki/Task_(project_management)), subtasks, and work packages) which include all steps necessary to achieve the objective.

[Diagram

Description automatically generated](https://en.wikipedia.org/wiki/File:NASA_NF_533_reporting_structure.jpg)

Example of work breakdown structure applied in a NASA reporting structure[[4]](https://en.wikipedia.org/wiki/Work_breakdown_structure#cite_note-NASA01-4)

The work breakdown structure provides a common framework for the natural development of the overall planning and control of a contract and is the basis for dividing work into definable increments from which the [statement of work](https://en.wikipedia.org/wiki/Statement_of_work) can be developed and technical, schedule, cost, and labor hour reporting can be established.[[4]](https://en.wikipedia.org/wiki/Work_breakdown_structure#cite_note-NASA01-4)

A work breakdown structure permits the summing of subordinate costs for tasks, materials, etc., into their successively higher level "parent" tasks, materials, etc. For each element of the work breakdown structure, a description of the task to be performed is generated.[[5]](https://en.wikipedia.org/wiki/Work_breakdown_structure#cite_note-5) This technique (sometimes called a *system breakdown structure*[[6]](https://en.wikipedia.org/wiki/Work_breakdown_structure#cite_note-6)) is used to define and organize the total [scope](https://en.wikipedia.org/wiki/Scope_(project_management)) of a [project](https://en.wikipedia.org/wiki/Project).

The WBS is organized around the primary products of the project (or planned outcomes) instead of the work needed to produce the products (planned actions). Since the planned outcomes are the desired ends of the project, they form a relatively stable set of categories in which the costs of the planned actions needed to achieve them can be collected. A well-designed WBS makes it easy to assign each project activity to one and only one terminal element of the WBS. In addition to its function in cost accounting, the WBS also helps map requirements from one level of system specification to another, for example, a cross-reference matrix mapping functional requirements to high level or low-level design documents. The WBS may be displayed horizontally in [outline](https://en.wikipedia.org/wiki/Outline_(list)) form or vertically as a tree structure (like an organization chart).

The development of the WBS normally occurs at the start of a project and precedes detailed project and task planning.

In the initial phase you can find the methodology used to initiate the response document such as tables for the individualizations of primary assets aimed to establish and prioritise levels of importance among the company’s components divided by groups: people, hardware and software to determinate and prioritise tasks to be undertaken based on risk assessment. Additionally, suppurative information about the company structure can be found. However, In the planning phase we are addressing the tasks and assigning them to different management areas. Then , the criteria are established to reflect current standard followed by budget estimation and Research controls. In the execution phase, you can find the steps to ensure the data storage and transmission, the criteria in which the devices and the application should be accessed.

Network scheduling dependency 1(tasks)

Program Evaluation and Review Technique (PERT)

How long?

What activity before?

What activity after?

Critical path

Microsoft project

Create a blueprint of the project activities

Identify specific responsibilities : assign task to manager to the corresponding areas

Identify project constrains and minimum qualities standards ISO standards

Simplify project monitoring: timeline to ensure quality, time and budget

A project is successful if is completed in time budget and standards

Quality deliverable

**Project methodologies**

**PMI = best practice**

|  |  |  |
| --- | --- | --- |
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| **Cost** | **Managing the financial resources dedicated to the project** | **Allocate costs of financial effort for each implementation** |
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| **Integration** | **Define the steps to the implementation of new measurements** | **Developing, planning and executing project change control** |
| **Quality** | **Ensure the quality standards set for the projects** | **Measuring the deliverables against the quality specification** |
| **Risk** | **minimise the occurrence and severity of identified risks and monitor and control risks in the future** | **Identify, isolate, eliminate and control risks** |
| **Scope** | **Identification of what needs to be done** | **Identifying management intent** |
| **Stakeholders** | **Identify and maintain relation with entities involve on the project** | **Planning stakeholders’ management** |
| **Time** | **Value the time and effort** | **Work break down estimate resources** |

**Execution Phase?**

**Risk**

**Control Phase?**

Access Control; Audit and Accountability; Awareness and Training; Configuration Management; Contingency Planning; Assessment, Authorization and Monitoring; Identification and Authentication; Incident Response; Maintenance; Media Protection; Personnel Security; Physical and Environmental Protection; Planning; Risk Assessment; System and Services Acquisition; System and Information Integrity; System and Communications Protection; Program Management; PII Processing and Transparency; Supply Chain Risk Management

**Close Phase?**