**PROJECT MANAGEMENT PLAN**

**Tracking Activity Project Management**

**Asia Pacific College**

**3 Humabon Place, Magallanes,**

**Makati City, Philippines**

**May 2023**

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# **Company Profile**

|  |  |
| --- | --- |
| Registered Name: | Asia Pacific College |
| Company Logo: | Asia Pacific College: photo gallery |
| Address: | Asia Pacific College, 3 Humabon Place, Magallanes, Makati City, Philippines |
| Telephone Number: | +63 917 816 5570 |
| Line of Business: | Private Tertiary Education Institution |
| Type of Customers: | Students and Teachers |
| Date of Registration: | 1991 |
| President: | Dr. Teresita P. Medado |
| Number of Employees: | 51-200 |

Table 1 High-Level Company Information

The College is devoted to advancing knowledge and educating students in information technology, commerce, engineering, accountancy, entrepreneurship, multimedia arts, and other areas of scholarship that will best serve the global community in the 21st century. Graduates of APC are now found in all sectors of businesses and industries. They translate their knowledge into products, services, and jobs.

**Project: Tracking Activity Project Management (TAPM) for Asia Pacific College’s Project Development Office**

The Project Tracking Monitoring System is designed to streamline project management and improve collaboration among team members. The Work Bench Structure is organized according to the five phases of the Project Management Lifecycle, from Initiation to Closeout.

The system features a Project Dashboard, where users can see an overview of all projects they participate in, as well as individual project workspaces for detailed project planning and execution. The Task Board allows users to assign tasks, set priorities and deadlines, and track progress, while the File Sharing feature facilitates collaboration by allowing users to upload and share important project documents and files.

Communication features, including chat, video conferencing, and email integration, allow team members to stay connected and informed throughout the project. Reporting and Analytics features provide real-time data on project progress, resource utilization, and budget tracking, allowing for better decision-making and risk management.

**The vision, mission, and value of Asia Pacific College:**

**Vision:**

Asia Pacific College envisions itself to be the preferred Higher Education Institution bridging academe and industry with its programs founded on the concepts and applications of IT, guided by the core values of integrity, industry and innovation that works.

**Mission:**

Asia Pacific College, powered by education and industry professionals as faculty and a balanced curriculum, aims to provide business and the information and communications technology industry in the Philippines and in the global community lifelong learning graduates who are anchored on the principles of integrity and professionalism.

**Values:**

APC aims to produce graduates with a keen sense of industry or hard work, integrity or honesty that is coupled with strong moral/ethical principles, and innovation or the consistent introduction of new and creative methods or ideas.

# **Business Case**

## **2.1 Problem Definition**

### **2.1.1 Problem Statement**

The Project Development Office of Asia Pacific is having difficulty monitoring the status of the school's internal and external projects promptly. This includes the lack of visibility into project status, potential bottlenecks or delays, poor communication among team members, and difficulty aligning project objectives with overall business goals. These issues often result in missed deadlines, cost overruns, and poor-quality outcomes.

### **2.1.2 Organizational Impact**

The implementation of an integrated project management system within the Project Development Office of Asia Pacific will have a significant impact on the organization. It will address existing challenges such as lack of visibility, poor communication, and difficulty aligning project objectives with business goals. By providing real-time project status updates, enabling efficient communication among team members, and ensuring alignment with business goals, the system will enhance project performance, reduce delays, and improve outcomes. This will lead to cost savings, increased efficiency, and higher customer satisfaction rates, driving overall organizational performance and profitability.

Moreover, the integrated system will streamline processes by consolidating dispatch tools and reducing manual tasks. This will result in improved efficiency, faster response times, and reduced errors. The optimized process will enable team members to allocate resources effectively, resolve outages promptly, and enhance customer satisfaction. Additionally, the system will free up resources and savings that can be redirected towards other important initiatives, contributing to the organization's success, and fostering continuous improvement. Overall, the implementation of the integrated project management system will transform the Project Development Office, addressing existing issues, optimizing processes, and driving positive impacts on project delivery and overall organizational performance.

### **2.1.3 Technology Migration**

This are the technology migration for the Project Tracking Activity Management:

* Assess the current technology stack: The first step in migrating to any system is to assess the current technology stack. This involves identifying the current software, hardware, and infrastructure that are in place. You will need to determine the strengths and weaknesses of the current system and identify areas that require improvement.
* Define the target technology stack: Once you have assessed the current technology stack, you need to define the target technology stack. This involves identifying the technologies and platforms that will be used to build the new system. You will need to consider factors such as scalability, security, and user experience when selecting modern technologies.
* Plan the migration strategy: With the current and target technology stacks identified, you need to plan the migration strategy. This involves determining the steps required to move from the current system to the new system. You will need to consider factors such as data migration, testing, and deployment when planning the migration strategy.
* Execute the migration: Once the migration strategy has been defined, you can begin to execute the migration. This involves implementing modern technologies, migrating data from the old system to the new system, and evaluating the new system to ensure it meets the requirements.
* Train the users: After the new system has been deployed, you will need to train the users in how to use the new system. This involves providing documentation, training sessions, and support to ensure the users are comfortable with the new system.
* Monitor and maintain the new system: Finally, you will need to monitor and maintain the new system to ensure it continues to meet the requirements. This involves monitoring the system for issues, performing regular maintenance, and making updates, as necessary.

## **2.2 Project Overview**

### **2.2.1 Project Description**

The Asia Pacific College's Project Development Office is facing difficulties in monitoring the status of their internal and external projects efficiently. The lack of a reliable system to track project progress and generate reports promptly has caused delays in project delivery and unmet expectations for industry partners. To address these issues, the project group will develop a website/system that can assist the PDO in monitoring the progress of their projects.

The system will have the capacity to provide real-time updates on the status of projects under PBL2 and allow the PDO to manage project expectations efficiently.

The system will be developed with the following features:

* User-friendly interface: The system should be easy to use and accessible with the PDO. The system interface should be intuitive and provide a clear overview of the project's progress.
* Tracking and reporting: The system should be able to track project progress and generate reports promptly. The system should provide real-time updates on the status of projects under PBL2.
* Collaboration space: The system should provide a collaboration space for student groups and faculty members to disseminate files, ideas, and information. The collaboration space should be well-suited for project-based learning, allowing students and faculty to work together efficiently and effectively.
* Security: The system should have a robust security mechanism to ensure the confidentiality of project information. The project group will follow a project management framework to ensure that the project is completed within the given timeline and budget. The project plan will include the project scope, objectives, timeline, budget, and resources required.

Upon completion of the project, the system will be delivered to the PDO, and the project group will conduct a post-implementation review to ensure that the system has met the project's objectives. The system will be expected to enhance the PDO's capacity to track project progress and generate reports in a timely manner, resulting in improved project delivery and industry partner satisfaction.

### **2.2.2 Goals and Objectives**

This project's main goal is to develop a website/system that will keep the PDO up to date on the status of projects under the Asia Pacific College's Project Based Learning (PBL2).

To achieve this, the group will develop the system with the following intentions:

* Escalate the PDO's capacity to track projects and generate reports in a timely manner; this needs the design and deployment of software which is planned to complete during PBL1.
* Provide a well-suited collaboration space so that student groups and faculty can disseminate files, ideas, and information between PBL1 and PBL2, assisting in the timely completion of the project.

### **2.2.3 Project Performance**

To evaluate the performance and outcomes of the proposed project for developing a Tracking Activity Project Management system for Asia Pacific College's Project Development Office, the following measures should be considered:

User Adoption:

* Measure the percentage of users actively using the integrated platform.
* Track the number of active users over time to assess adoption trends and user engagement.

User Satisfaction:

* Conduct surveys or gather user feedback to measure satisfaction with the newly developed platform.
* Assess the percentage of users who report that the platform meets their needs.
* Determine the percentage of users who would recommend the platform to others.

Time Saved:

* Compare the time taken to complete tasks using the integrated platform versus using individual tools separately.
* Measure the efficiency gains and time savings achieved through the centralized tracking and management capabilities of the developed system.

Data Accuracy:

* Evaluate the accuracy of data entered the system compared to the individual tools.
* Measure the reduction in errors and improved data integrity resulting from the use of the integrated platform.

Cost Savings:

* Compare the cost of maintaining the integrated platform versus maintaining the individual tools separately.
* Assess the potential cost savings achieved through consolidation and streamlined processes provided by the developed system.

Process Improvement:

* Measure the efficiency and effectiveness of processes using the integrated platform compared to processes using individual tools separately.
* Evaluate the reduction in manual effort, improved collaboration, and streamlined workflows resulting from the implemented system.

By monitoring and evaluating these measures, the project team can assess the performance and outcomes of the Tracking Activity Project Management system. The data collected will provide insights into user adoption, satisfaction, time savings, data accuracy, cost savings, and process improvements. This information will be crucial for identifying areas of success and opportunities for further enhancement to meet the objectives and requirements of the Project Development Office at Asia Pacific College.

### **2.2.4 Project Assumptions**

Here are the preliminary assumptions for the proposed system:

1. User Adoption: It is assumed that the users within the Project Development Office will actively adopt and utilize the integrated platform for tracking project activities.
2. User Satisfaction: It is assumed that the newly developed platform will meet the needs and expectations of the users, resulting in a prominent level of user satisfaction. The assumption is based on user feedback mechanisms such as surveys and recommendations.
3. Time Saved: It is assumed that the integrated platform will significantly reduce the time required to complete tasks compared to using individual tools separately. This assumption assumes that the platform will streamline processes and provide efficient project management capabilities.
4. Data Accuracy: It is assumed that the developed system will enhance the accuracy of project data entered the platform compared to the accuracy achieved using individual tools. This assumption assumes that the integrated platform will provide standardized data entry mechanisms and minimize errors.
5. Cost Savings: It is assumed that the implementation and maintenance of the integrated platform will result in cost savings compared to maintaining the individual tools separately. This assumption assumes that consolidating the tools into a single platform will reduce licensing, training, and maintenance costs.
6. Process Improvement: It is assumed that using the integrated platform will lead to improved efficiency and effectiveness in project-related processes compared to using the individual tools separately. This assumption assumes that the platform will provide streamlined workflows, enhanced collaboration, and centralized project tracking capabilities.

It is important to note that these assumptions should be validated and monitored throughout the project to ensure their accuracy and adjust the project approach if necessary.

### **2.2.5 Project Constraints**

The following constraints must be considered to ensure the project is completed successfully and meets the PDO's requirements and expectations.

* Time: The project must be completed within the given timeline, as specified in the project plan. Any delays in the project timeline may affect the project's objectives and deliverables.
* Budget: The project must be completed within the allocated budget, as specified in the project plan. Any overspending may affect the project's financial viability and sustainability.
* Resources: The project team must work with the resources available, such as personnel, equipment, and software, to complete the project. The availability of resources may affect the project's scope and quality.
* Technology: The project must be developed using technology that is compatible with the PDO's existing technology infrastructure. Any compatibility issues may affect the system's performance and reliability.
* User Acceptance: The system must be designed and developed in collaboration with the PDO, ensuring that the system's features and functionalities meet the PDO's requirements and expectations.
* Security: The system must have a robust security mechanism to ensure the confidentiality of project information. Any security breaches may affect the system's credibility and trustworthiness.
* Testing and Quality Assurance: The system must be assessed and undergoes quality assurance to ensure that it is free from defects and errors. Any defects or errors in the system may affect the system's performance and reliability.
* Legal and Regulatory Compliance: The system must comply with legal and regulatory requirements, such as data protection and privacy laws. Any noncompliance may affect the system's credibility and trustworthiness.

### **2.2.6 Major Project Milestones**

The specific timeline and milestones for each phase of the project will depend on the project scope, complexity, and resource availability. By breaking down the project into these major milestones, you can track progress and ensure that the project stays on schedule and within budget.

Here are some possible major project milestones for the development and deployment of the tracking activity project management:

* Project Planning: This involves defining the project scope, objectives, requirements, and constraints, and creating a project plan outlining the project timeline, budget, and resource allocation.
* System Design: This involves designing the system architecture, interface, functionality, and security mechanisms, and creating detailed system specifications and wireframes.
* System Development: This involves coding, testing, and debugging the system's front-end and back-end components, as well as integrating the system with the PDO's existing technology infrastructure.
* System Testing: This involves assessing the system's functionality, performance, usability, and security, as well as conducting user acceptance testing with the PDO and other stakeholders.
* System Deployment: This involves deploying the system on the PDO's servers or on a cloud-based platform, as well as configuring the system's settings, access permissions, and security protocols.
* User Training: This involves providing user training and documentation to the PDO's staff, faculty, and students, as well as conducting system demonstrations and providing ongoing technical support.
* System Maintenance: This involves monitoring the system's performance, troubleshooting issues, applying software updates and security patches, and ensuring the system's ongoing reliability and security.

## **2.3 Strategic Alignment**

The project aligns with the goals and vision of the faculty, teachers and PDO which includes the needs to provide efficiency, enhancement of academic performance and simple to use application for tracking progress, task completion, display project information and monitoring projects being managed. Also, this project will be useful in taking on projects like PBL2, which many projects are based on.

The range of this project will mostly impact the Faculty, PDO, teachers, and students. The project team will conduct a stakeholder analysis to understand and meet the needs and expectations of the users who will be involved in the project, which will be included in the project plan. The team will also conduct a risk analysis to detect the potential problems that may hinder the project progress.

The project will be conducted with the guidance of the advisors, teachers, client, and the students assigned will work on the project with intensive research, documentation, and enough programming skills to ensure the project meet the requirements of the stakeholders. Lastly, to measure the project's success is if it has reached the approval of the panelist, also, the project team will analyze the efficiency and impact the project has on the participants or users.

## **2.4 Cost and Benefit Analysis**

The project will mostly include the cost of developing the software, how to use our instruction for the applications, and the server that will be used. The benefit side of this project, upon forming the analysis it can improve the delivery of the project, increasing the satisfaction of the client, increasing efficiency, and saving the time on project tracking and reporting. Other benefits include better collaboration and communication with student groups and faculty/teachers, and security and privacy of project information.

**Costs:**

* Software Development: The primary cost of the project will be incurred in the development of the software application. This includes the expenses related to hiring developers, designers, and testers, as well as any software licenses or tools required for development.
* Instruction and Training: Another cost component is the creation of detailed instructions and training materials for the users of the application. This involves the development of user manuals, tutorials, and training sessions to ensure effective utilization of the software.
* Server Infrastructure: The project requires a dedicated server to host and support the software application. The cost includes the purchase or rental of server hardware, networking equipment, and ongoing maintenance and support expenses.

**Benefits:**

* Improved Project Delivery: The software application will streamline project management processes, enabling better planning, organization, and execution. This will lead to improved project delivery, ensuring timely completion and meeting client expectations.
* Increased Client Satisfaction: By implementing the software application, the project team will be able to deliver a more efficient and transparent service to clients. This will result in higher client satisfaction levels, enhancing the reputation of the organization and potentially leading to increased business opportunities.
* Enhanced Efficiency: The software application will automate various project tracking and reporting tasks, reducing the need for manual effort, and minimizing errors. This will result in increased efficiency, allowing the project team to allocate their time and resources more effectively.
* Better Collaboration and Communication: The application will facilitate improved collaboration and communication among student groups, faculty/teachers, and other project stakeholders. It will provide a centralized platform for sharing information, exchanging ideas, and coordinating tasks, leading to enhanced teamwork and productivity.
* Improved Security and Privacy: The software application will incorporate robust security measures to protect project information. This will safeguard sensitive data, ensuring confidentiality and privacy. It will also comply with relevant regulations, mitigating the risk of data breaches and potential legal consequences.

**MEASURING PROJECT COSTS**

The Project Tracking and Monitoring System (TAPM) cost almost nothing and involved the creation of software using Laravel and Visual Studio, as well as GitHub, we will use Man-hours and hourly rate to measure and control our project costs.

To estimate the cost of the project based on the given information, you can use the following formula: Total Cost = Number of Man-Hours \* Hourly Rate

Assuming a junior programmer salary of 375 Pesos per hour, the cost of the project can be estimated as follows:

Total Number of Man-Hours = 40 hours/week \* 13 weeks = 520 Hours

Total Cost = 520 Hours \* 375/hour = 195000 So, the estimated cost of the project based on person-hours and junior programmer salary is 195000 Pesos.

However, please note that this is only an estimate, and the actual cost may vary based on factors such as project complexity, resource utilization, and unforeseen events. To forecast future project costs, we will review cost performance over time and across work packages or schedule activities. This will help us identify any potential cost overruns or deviations from our project plan. By measuring and monitoring our project costs, we can ensure that we stay on track and deliver our project within budget.

**REPORTING FORMAT**

The ideal reporting format at the cost management plan for the Project Tracking and Monitoring System would be a financial report using a spreadsheet, excel, or table. This will include all the technical, maintenance, and for the hourly work of each member, information for the project budget that will be incurred.

In addition to that there are format that are easily understandable and helpful for the stakeholders and the project team, reporting is especially needed in seeing how much the expected cost and amount of a project, some helpful infographic can also be used upon reporting. The following formats can be used for the project Tracking and Monitoring System:

* Executive Summary
* Budget Overview
* Cost Variance Analysis
* Budget Forecast
* Cost Management Metrics
* Approval Sign off
* Appendices

**COST VARIANCE RESPONSE PROCESS**

Cost variable response for project TAPM is in the following:

Control Thresholds

* The Control Threshold for the TAPM project is a cost variance of more than 10% or less than -10%. If the project reaches one of these Control Thresholds, a Cost Variance Corrective Action Plan is required.

Reporting

* The project team must report any cost variances to the Project Manager within two business days of detection.

Options for Corrective Action: Upon escalation, the Project Manager will present the

* Increasing the budget for the project
* Reducing scope or quality
* Revising the project schedule
* Changing resource allocation

Selection of Corrective Action:

* Within three business days from when the Project Sponsor selects a corrective action option, the Project Manager will present the Project Sponsor with a formal Cost Variance Corrective Action Plan.

Cost Variance Corrective Action Plan:

The Cost Variance Corrective Action Plan will detail the actions necessary to bring the project back within budget and how the effectiveness of the actions in the plan will be measured. The plan will include:

* A description of the corrective actions to be taken
* A timeline for implementation of the actions
* A budget for the actions

**COST CHANGE CONTROL PROCESS**

The cost change control process for a project that focuses on tracking activity project management includes:

1. Identifying and documenting the change:
   * Suggested changes to the budget of the project must be documented on a cost change request form.
2. Evaluating the impact of the change:
   * The project team will evaluate the change request’s effect on the project’s cost after it has been documented. The cost estimate, budget, and resource allocation plan may need to be reviewed again to see if any adjustments are required.
3. Approving of the change:
   * The change request must be reviewed by the stakeholders, including the project sponsor. After approval, the change must be documented and shared with the project team.
4. Updating the project plan:
   * The project plan should be updated to reflect the change after it has been approved.
5. Reporting on the cost change:
   * The project team needs to keep updated on the cost of the project and report on any changes. This can help spot problems early and keep the project’s finances on track. The cost change control process will be implemented to ensure that any changes that have an impact on the project’s cost are correctly assessed and documented by creating an effective cost change control approach. This can reduce the possibility of excess costs and guarantee that the project is completed within the budget.

**PROJECT BUDGET**

In the context of the Tracking Activity Project Management project, a budget has been developed to ensure that all project costs are accounted for and managed throughout the project's life cycle. This budget will serve as a baseline for monitoring the project's financial performance and ensuring that it remains on track to meet its objectives within the approved budget. Although we the project team focused on producing the application with not many expenditures there are some possibilities of cost such as:

Total Project Cost: PHP 345,000.00

|  |  |  |
| --- | --- | --- |
| **Category** | **Duration/Frequency and Trigger** | **Total Cost in PHP** |
| Manpower Cost | 13 weeks | PHP 195,000.00 |
| Training Cost | One-time purchase | PHP 50,000.00 |
| Contingency Cost | 6 months | PHP 100,000.00 |
| Total Direct Costs |  | PHP 345,000.00 |

Table 2 Project Budget Direct Cost

|  |  |  |
| --- | --- | --- |
| **Category** | **Duration/Frequency and Trigger** | **Total Cost in PHP** |
| Equipment | One-time purchase | PHP 80,000.00 |
| Total Miscellaneous Costs |  | PHP 50,000.00 |

Table 3 Project Budget Miscellaneous Cost

# **Project Charter**

## **3.1 Project Purpose/Justification**

### **3.1.1 Business Need**

In today's fast-paced business environment, there is a growing demand for efficient and effective project management. The PDO needed to be able to deliver projects on time and within the period to remain concise. Tracking Activity Project Management System can help organizations meet this demand by improving project visibility, communication, and efficiency.

PDO and Faculty struggle with project management, often due to the number of projects to be handled or seeing a project progress and updates. By implementing Tracking Activity Project Management System, organizations can establish best practices for project management and improve their overall efficiency and productivity.

Advances in technology have made Tracking Activity Project Management System more accessible and affordable than ever before. Cloud-based project management tools, for example, can be accessed from anywhere with an internet connection and provide real-time project status updates, making it easier for teams to collaborate and communicate effectively.

In summary, the Business Need for Tracking Activity Project Management System is driven by a combination of market demand, organizational need, customer request, and technological advance. By implementing these tools, organizations can improve their project management capabilities, meet customer demands, and stay competitive in the marketplace.

### **3.1.2 Business Objectives**

The business objectives for this project are to direct support of our corporate strategic plan to improve IT security and reduce costs associated with loss and waste.

* Improve project outcomes: The primary objective of implementing tracking activity project management is to improve project outcomes, such as meeting project timelines, staying within budget, and delivering quality products or services.
* Enhance team collaboration: By implementing project management tools, team members can work together more effectively and collaborate on projects in real-time, regardless of their location.
* Optimize resource allocation: By tracking activity and monitoring progress, project managers can identify areas where resources may be over-allocated or under-allocated.
* Increase efficiency: Project management tools can help to automate repetitive tasks, track progress, and provide real-time updates, which can increase efficiency and reduce the risk of errors.

## **3.2 Project Description**

The project will be executed in phases, with the first phase focused on assessing the PDO/Faculty current project management practices and identifying areas for improvement. This will involve working closely with PDO, team members, and faculty/teachers to gather information about current project management practices and identify gaps and opportunities for improvement.

In the subsequent phases, project management tools and technologies will be implemented, including project planning software, and project tracking and viewing mechanisms. The project team will work with project managers and team members to ensure that these tools are customized to meet the organization's specific needs.

### **3.2.1 Project Objectives**

The objectives which mutually support the milestones and deliverables for this project have been identified.  To achieve success on the project, the following objectives for the tracking activity project management project must be met within the designated time allocations:

* Specific: Improve project outcomes by reducing project completion time by 70% compared to the previous term and achieve 100% by the last term.
* Measurable: Increase team collaboration by achieving a 20% increase in team member participation in project planning and status meetings.
* Attainable: Implement a new project management tool that meets the organization's specific needs and can be deployed within the next 3 months.
* Realistic: Optimize project to what the project team can accomplish and still maintain the quality and scope.
* Time-bound: Foster innovation by implementing a new idea management system and receiving at least new ideas from team members within the first term period/months.

### **3.2.2 Success Criteria**

To ensure the success of the project, the following objectives must be achieved within the designated time and budget allocations:

* Adoption and Satisfaction: The Project Development Office (PDO) should successfully adopt the new system, and at least 90% satisfaction rate among the PDO members should be attained.
* Reduction of Incorrect Dispatch Procedures: The implementation of the new system should lead to a minimum 50% reduction in incorrect dispatch procedures within the first year.
* Improved Outage Restoration: The new system should contribute to at least a 20% improvement in outage restoration efforts within the first year.
* Cost Savings: The implementation of the new system should result in cost savings exceeding one million pesos in the first year.
* Timely and Within Budget Implementation: The new system should be completed and implemented as per the established timeline and budget specified in the project plan.

By meeting these objectives, the project will be considered successful, demonstrating effective adoption, improved efficiency, cost savings, and adherence to project timelines and budgets. These objectives serve as critical benchmarks for evaluating the project's achievements and ensuring its overall success.

### **3.2.3 Requirements**

This project must meet the following list of requirements to achieve success.

* The project management system should be user-friendly and intuitive, with a simple and easy-to-use interface.
* The system should allow for easy collaboration and communication among team members, faculty, or teachers, and PDO.
* The system should provide real-time data on project progress, projects managed, project details and members.
* The system should be secure and provide role-based access to data, ensuring that only authorized individuals can access sensitive project information.
* The system should integrate with existing software and tools, including calendar, and document management systems.
* The system should allow for customization to meet the PDO’s/faculty specific needs and workflows.

### **3.2.4 Constraints**

The following constraints pertain to the ISA project:

* The PDO may have a strict deadline to complete all the projects, which could limit the amount of time available for planning and execution.
* The project may have competing stakeholder interests or conflicting priorities, which may need to be addressed and balanced to achieve project success.
* The project team may have skill gaps that need to be addressed to execute the project successfully such as learning Laravel and bootstrap syntax.

### **3.2.5 Assumptions**

The following is a list of assumptions.  Upon agreement and signature of this document, all parties acknowledge that these assumptions are true and correct:

* This project has the full support of the PDO, faculty, and teachers.
* The project team assumes that the project timeline is feasible and will not change significantly, allowing them to plan and execute accordingly.
* The project team assumes that the project requirements are clear and well-defined, and that any changes to the requirements will be communicated promptly.
* The project team assumes that PDO will be supportive of the project and will provide necessary resources and assistance as needed.
* The project team assumes that the program being used will function as intended and not require significant troubleshooting or debugging.
* The project team assumes that communication channels will be clear and open, allowing for effective collaboration and problem-solving.

### **3.2.6 Preliminary Scope Statement**

The scope of this project is to develop and implement a tracking activity project management system for PDO, or faculty/teachers. This will involve identifying necessary metrics and tools, developing a project management plan, and implementing the tracking system. The project will require an advisor and team with expertise in project management and software development, as well as access to necessary software tools. The project will be considered complete when the tracking system is successfully implemented, users are able to use and accept the system, and improved project management processes and outcomes are demonstrated. This preliminary scope statement is subject to change as the project undergoes progressive elaboration and additional details are identified.

## **3.3 Risks**

The following risks for the ISA project have been identified.  The project manager will determine and employ the necessary risk mitigation/avoidance strategies as appropriate to minimize the likelihood of these risks:

* There may be quality issues associated with the tracking system, such as errors or omissions in the data captured or problems with the functionality of the system.
* The introduction of a new tracking system may be met with resistance from faculty or PDO who are accustomed to existing processes and may be reluctant to adopt new ways of working.

## **3.4 Project Key Deliverables**

The following deliverables must be made upon the successful completion of the ISA project.  Any changes to these deliverables must be approved by the project sponsor.

* A detailed plan outlining the approach, tasks, and timelines for completing the project.
* A design document describing the specifications, features, and functionality of the tracking system to be developed.
* Regular status reports to keep stakeholders informed on project progress, milestones, issues, and risks.
* A presentation to assess the effectiveness of the tracking system and identify opportunities for improvement.
* A working prototype of the tracking system to demonstrate its functionality and test it with PDO.

## **3.5 Summary Milestone Schedule**

**SCHEDULE CONTROL**

|  |  |
| --- | --- |
| **PLAN** | **SCHEDULE** |
| Project Start | June 7, 2022 |
| Project Client Search | June 9, 2022 |
| Project Document | June 11, 2022 |
| Project Design | January 6, 2023 |
| Project System | January 9, 2023 |
| Project Presentation | February 4, 2023 |
| Business Case | April 20, 2023 |
| Project Charter | April 21, 2023 |
| Stakeholder Analysis | April 21, 2023 |
| Scope Management Plan | May 2, 2023 |
| Cost Management Plan | May 2, 2023 |
| Time Management Plan | May 2, 2023 |
| Work Breakdown Structure | May 2, 2023 |
| Project Management Documentation | May 3, 2023 |

Table 4 Summary Milestone Schedule

**SCHEDULE CHANGES AND THRESHOLDS**

|  |  |  |
| --- | --- | --- |
| **PLAN** | **SCHEDULE** | **POSSIBLE CHANGES** |
| Project Start | June 7, 2022 | This may not be a feasible start date depending on the availability of resources and stakeholders. You may need to adjust this date to a later time if.  necessary. |
| Project Client Search | June 9, 2022 | No possible changes. |
| Project Document | June 11, 2022 | Changes if the project will continue. |
| Project Design | January 6, 2023 | Depending on the complexity of the project, the design phase may take longer than expected. You may need to extend the duration of this phase.  or allocate more resources to it. |
| Project System | January 9, 2023 | Like the design phase, the system phase may require more time or resources.  depending on the project's complexity.  You may need to adjust.  the timeline accordingly. |
| Project Presentation | February 4, 2023 | The presentation date may need to be adjusted if any of the preceding tasks take place.  longer than expected. |
| Business Case | April 20, 2023 | The business case may need to be revisited and updated throughout the project. You may need to allocate more time for this task or schedule.  multiple reviews. |
| Project Charter | April 21, 2023 | The project charter may need to be revised based on the project's progress or changes in scope. You may need to allocate more time for this task or schedule.  multiple reviews. |
| Stakeholder Analysis | April 21, 2023 | Like the project charter, the stakeholder analysis may need to be revisited and updated throughout the project. You may need to allocate more time.  for this task or schedule multiple reviews. |
| Scope Management Plan | May 2, 2023 | The scope management plan may need to be revised based on the project's progress or changes in scope. You may need to allocate more time for this task or schedule.  multiple reviews. |
| Cost Management Plan | May 2, 2023 | The cost management plan may need to be revised based on the project's progress or changes in budget. You may need to allocate more time for this task.  or schedule multiple reviews. |
| Time Management Plan | May 2, 2023 | The time management plan may need to be revised based on the project's progress or changes in schedule. You may need to allocate more time for this task or schedule.  multiple reviews. |
| Work Breakdown Structure | May 2, 2023 | The work breakdown structure may need to be revised based on the project's progress or changes in scope. You may need to allocate more time for this task or schedule multiple reviews. |
| Project Management Documentation | May 3, 2023 | Depending on the scope of the project, the project management documentation may require more time or resources. You may need to adjust the timeline accordingly. |

Table 5 Schedule Changes and Thresholds

## **3.6 Budget Summary**

The table below shows a summary budget for the project, including the proposed cost category, description, and their estimated costs. This budget is necessary for the successful completion of the project.

|  |  |  |
| --- | --- | --- |
| **Category** | **Duration/Frequency and Trigger** | **Total Cost in PHP** |
| Manpower Cost | 13 weeks | PHP 195,000.00 |
| Training Cost | One-time purchase | PHP 50,000.00 |
| Contingency Cost | 6 months | PHP 100,000.00 |
| Total Direct Costs |  | PHP 345,000.00 |

Table 6 Budget Summary Direct Costs

|  |  |  |
| --- | --- | --- |
| **Category** | **Duration/Frequency and Trigger** | **Total Cost in PHP** |
| Equipment | One-time purchase | PHP 80,000.00 |
| Total Miscellaneous Costs |  | PHP 50,000.00 |

Table 7 Budget Summary Miscellaneous Costs

## **3.7 Project Approval Requirements**

Success for the Tracking Activity Project Management includes obtaining approval from the project sponsor and stakeholders for the project charter, business case, and project plan. The project manager must ensure that the project aligns with the organization's strategic plan and that the project objectives are SMART. The project manager must also obtain approval for any changes to the project scope, schedule, or budget. Finally, the project manager must ensure that all project documentation is up to date and that project deliverables meet quality standards before seeking final approval and closing out the project.

Success for the Tracking Activity Project Management (TAPM) project will be achieved when a fully tested program functions properly, and all technical documentation, diagrams, finalization of the paper, is fully approved throughout the panelist being presented and from the client and advisor within term.  Additionally, success for the TAPM project will be determined by meeting the project objectives and completing the project within the approved schedule. The project team must also ensure that all deliverables are of high quality and meet the needs of the PDO. Regular communication with the PDO, advisor, teacher, and project team are critical to ensure that the project stays on track and any issues are addressed in a timely manner. Finally, once the project is completed, a thorough evaluation will be conducted to ensure that all project requirements have been met and that the project has achieved its intended outcomes.

# **Project Management Approach**

The Project Sponsor possesses complete authority to authorize the implementation of plans and any necessary modifications. Conversely, the Project Manager is accountable for overseeing and executing the project in alignment with the established Project Plan. The project team will be composed of individuals from various departments, including administration, product development, and quality assurance.

The Project Manager will collaborate with all available resources to conduct project planning. The project sponsor will thoroughly assess and endorse all project and subsidiary management plans. Additionally, the project sponsor will make all funding decisions. If approval authority is delegated to the project manager, a written agreement signed by both the project sponsor and project manager is required.

# **Project Technical Approach**

In implementing the Tracking Activity Project Management, our strategic approach is grounded in a comprehensive evaluation of the project's requisites and limitations. Our team will adhere to a meticulously planned and flexible product development methodology, specifically designed to guarantee the punctual delivery of an exceptional product that aligns with the client's envisioned outcomes.

## **5.1. Product Development Methodology**

Our product management approach combines elements of both agile and traditional project management frameworks to optimize the development process. By leveraging agile methods like Scrum, we can achieve rapid iterations and incorporate continuous feedback from stakeholders.

Concurrently, we will utilize traditional project management methods such as Waterfall to ensure timely delivery and adherence to budgetary constraints.

The methodology encompasses the following sequential steps:

1. Project Initiation: This phase involves identifying the project goals, stakeholders, and overall scope. We establish clear objectives and define the project's initial requirements and constraints.
2. Planning: In this stage, we create a comprehensive project plan that outlines tasks, timelines, resource allocation, and communication strategies. The plan serves as a roadmap for the project's execution and guides decision-making throughout.
3. Execution: During the execution phase, we carry out the planned activities, develop the product, and implement the necessary processes. Agile practices, like Scrum, enable iterative development, regular team collaboration, and frequent feedback from stakeholders.
4. Monitoring and Controlling: Throughout the project, we continually monitor progress, track key performance indicators, and assess adherence to the project plan. By closely managing resources, risks, and dependencies, we can proactively address any issues or deviations.
5. Closure: Once the product is developed and meets the specified criteria, we conclude the project. This involves finalizing documentation, conducting final reviews, obtaining client approval, and transitioning the product to the appropriate stakeholders or operational teams.

Throughout the product development life cycle, we emphasize continuous communication with the client to ensure their needs are met and to provide regular updates on project progress. Additionally, we prioritize user experience and design, aiming to create an intuitive and user-friendly product that aligns with customer expectations.

By combining agile and traditional project management approaches, we can leverage the benefits of iterative development, stakeholder collaboration, and efficient project control. This hybrid methodology allows us to deliver high-quality products within specified timelines and budgetary constraints.

## **5.2. Technical Architecture**

The Tracking Activity Project Management system will be developed using the Laravel Framework, which offers an expressive and elegant syntax and provides various features necessary for building modern web applications. This includes routing, validation, caching, queues, and file storage capabilities.

For the user interface, modern front-end technologies such as Bootstrap will be utilized. This will ensure a responsive and intuitive experience for users. In the back-end, a combination of Node.js and PHP syntax will be employed to create a robust and reliable system.

The technical architecture of the project management system follows a client-server model, where the client is a web browser and the server is the application server. The server-side will be developed and hosted using the XAMPP web server. The application will adhere to the MVC (Model-View-Controller) architecture provided by the Laravel Framework.

The Model component represents the data and business logic of the application. In Laravel, models are PHP classes that interact with the database, defining table structures and providing methods for data querying and manipulation. The View component is responsible for presenting data to users and represents the user interface. Laravel utilizes the Blade templating engine for creating clean and readable templates with dynamic content. The Controller acts as an intermediary between the Model and the View. It handles user requests, interacts with the Model to retrieve or update data, and passes the data to the View for display. Laravel's Controllers are PHP classes that manage the logic of different HTTP requests.

To ensure application security, the technical architecture incorporates Cross-Site Request Forgery (CSRF) Protection. Laravel automatically generates and verifies CSRF tokens for HTML forms submitted to the application. This safeguards against CSRF attacks, where attackers trick users into submitting malicious requests on their behalf.

Scalability is a key consideration in the technical architecture. Load balancers, clustering, and other scalability techniques will be implemented to accommodate future growth and expansion.

In summary, the technical architecture of the Tracking Activity Project Management system focuses on robustness, security, and scalability. It leverages the Laravel Framework, modern front-end technologies, and a client-server model to deliver a reliable and efficient application.

# **Project Management Plans**

## **6.1 Stakeholders Strategy Management Plan**

### **6.1.1. Introduction**

The Stakeholder Management Strategy for the project charter, which authorizes the Project Development Office (PDO) of Asia Pacific College to create a collaborative platform to monitor, track, participate and generate reports for projects assigned to student groups in partnership with industry partners. The PDO aims to work closely with proponents to develop a project plan that includes provisions for stakeholder management, among other key project components. The goal is to ensure that all stakeholders are adequately identified, engaged, and managed throughout the project's lifecycle. The successful implementation of the Stakeholder Management Strategy will enable the PDO to gain stakeholder support, prevent conflicts, and enhance project outcomes.

### **6.1.2. Identify Stakeholders**

**The stakeholders for the project include the following groups:**

* Project Development Office (PDO) staff
* Proponents of the project
* Student groups assigned to the project.
* Industry partners
* Project sponsors
* Faculty members
* End-users of the project outcomes

To identify stakeholders, the project team will employ a methodology that involves analyzing the project's goals, objectives, and requirements, and then mapping these to potential stakeholders who may be impacted by the project. The project team will also consult with key stakeholders to identify additional stakeholders and obtain feedback on stakeholder identification. All stakeholders will be defined based on their level of interest, influence, and involvement in the project. Great care and effort will be dedicated to ensuring that all stakeholders are identified and engaged throughout the project's lifecycle.

### **6.1.3. Key Stakeholders**

These stakeholders have been identified as key stakeholders because they potentially have the most influence over the project or may be most affected by the project. Additionally, they may be stakeholders who are resistant to the change represented by the project. Due to their significance, these key stakeholders may require more communication and management throughout the project's lifecycle. It is important to identify them to seek their feedback on their desired level of participation and communication to ensure that their concerns are addressed, and their needs are met. This helps to increase stakeholder engagement, improve project outcomes, and increase the likelihood of success.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Position** | **Internal/**  **External** | **Project Role** | **Contact Information** |
| Jayvee Cabardo | Director of Project Development | Internal | Project Sponsor | [jayveec@apc.edu.ph](mailto:jayveec@apc.edu.ph) |
| Project Development Office | Project Development Office | Internal | Internal User of the System | - |
| APC Faculty | APC Faculty | External | External User of the System | - |
| APC Student | APC Student | External | External User of the System | - |
| Noreen Keziah Sioco | Student at Asia Pacific College | External | Project Manager | [nssioco@student.apc.edu.ph](mailto:nssioco@student.apc.edu.ph) |

Table 8 Key Stakeholders Register

### **6.1.4. Stakeholder Analysis**

To analyze the list of identified stakeholders, the project team will categorize, or group stakeholders based on their level of interest, power, influence, and involvement in the project. This helps to determine the level of impact each stakeholder may have on the project and inform the team's communication and engagement strategies.

**The project team may use a variety of tools and techniques to quantify stakeholders, including:**

* Stakeholder analysis matrix: This tool helps to classify stakeholders based on their level of power and interest in the project. It can be used to prioritize stakeholders and inform communication and engagement strategies.
* Power/interest grid: This tool helps to classify stakeholders based on their level of power and interest in the project and can be used to identify which stakeholders require more attention and communication.
* Influence/impact matrix: This tool helps to classify stakeholders based on their level of influence and impact on the project and can be used to prioritize stakeholders and inform communication and engagement strategies.

The project team will use these tools and techniques to analyze the list of identified stakeholders, categorize them into groups, and determine their level of impact on the project. This information will be used to develop tailored communication and engagement 5 strategies to ensure that all stakeholders are informed and engaged throughout the project's lifecycle.

## **6.2. Scope Management Plan**

### **6.2.1. Introduction**

The success of any project depends on the effective management of its scope. The Tracking Activity Project Management team recognizes the significance of a comprehensive scope management plan in ensuring the project's success. Taking inspiration from the best practices and cutting-edge tools used in the Tracking Activity Project Management system, the team has created a Scope Management Plan that outlines the procedures and strategies that will be employed to define, document, and control the project's scope. By leveraging agile methodologies and real-time collaboration tools, the team aims to deliver a top-notch tracking activity management system that meets the needs and expectations of all stakeholders involved. This document serves as a guide for the team to execute the project successfully while maintaining the project's scope within the predefined limits.

**Scope Definition:** To define the scope of the Tracking Activity Project Management, the team will undertake the following activities:

1. Requirements gathering: A range of methods will be utilized to collect and document the requirements of the system. These will include interviewing stakeholders, organizing focus groups, and using online surveys.
2. User stories: The team will develop user stories that outline the system's required functionality from an end-user perspective. The stories will be prioritized according to their business value and will guide the project's development process.
3. Scope statement: The scope statement will be developed based on the user stories and requirements gathered. It will provide a high-level overview of the project scope, outlining the deliverables, exclusions, and constraints.
4. Scope baseline: The scope baseline will be developed by incorporating the scope statement and user stories into the project management plan. It will be regularly updated to reflect any changes in scope that may arise during the project's progress.

**Scope Documentation:** To document the scope of the Tracking Activity Project Management, the team will undertake the following activities:

1. Requirements documentation: The requirements for the system will be documented in a requirements specification document that outlines the system's functional and non-functional requirements.
2. Project management plan: The project management plan will include details about the scope of the project, including the scope statement and the scope baseline. The plan will also cover any other relevant information about the project scope, such as deliverables, exclusions, and constraints.
3. Change log: A change log will be maintained to keep track of all changes made to the scope of the project. This log will document the details of the change, its impact on the project, and the required approvals. The change log will be regularly updated to ensure that all changes are captured and appropriately managed.

**Scope Control:** To manage the scope of the Tracking Activity Project Management, the team will undertake the following activities:

1. Scope verification: Agile testing techniques will be employed by the project team to verify that the project deliverables meet the requirements and are consistent with the scope statement.
2. Scope change control: Any changes to the project scope will be handled through a formal change control process that includes an assessment of the impact on the project schedule, budget, and quality. This process will ensure that all scope changes are appropriately evaluated and managed.
3. Scope change review: Each scope change request will undergo a scope change review to ensure that the proposed change is necessary, feasible, and aligned with the project objectives. This review will involve an evaluation of the change's impact on the project, as well as an assessment of any potential risks and benefits.

### **6.2.2. Scope Management Approach**

1. Authority and responsibility for scope management will be held by Noreen Keziah S. Sioco, the project manager of group Abyss. She will closely collaborate with the project sponsor, Mr. Jayvee Cabardo, and other key stakeholders to establish and manage the project's scope.
2. The scope of the project will be defined by creating a Scope Statement, Work Breakdown Structure (WBS), WBS Dictionary, and a detailed Statement of Work (SOW). These documents will comprehensively describe the project deliverables, tasks, and requirements, and will be reviewed and endorsed by the project sponsor and other stakeholders before the project work commences.
3. The scope of the project will be measured and verified by using quality checklists, work performance measurements, and regular reviews of the project's progress against the scope baseline. Any deviations from the scope baseline will be identified and addressed through the scope change process.
4. The scope change process for the Tracking Activity Project Management will require the submission of a scope change request by Mr. Jayvee Cabardo, with final approval granted by the project sponsor. Any changes to the project's scope will be evaluated carefully to ensure that they align with the project's objectives and do not have a negative impact on the project schedule or budget.
5. The project's final deliverables will be accepted and approved by the project sponsor and other key stakeholders, with Mr. Jayvee Cabardo being responsible for verifying that all project requirements have been satisfied. Successful completion of the project will be confirmed once all deliverables have been accepted, and any unresolved issues have been resolved.

### **6.2.3 Roles and Responsibilities**

The following roles and responsibilities have been assigned to the team in relation to scope management:

1. Project Manager: Is responsible for defining and documenting the scope of the project, as well as controlling and approving scope changes.
2. Product owner: The product owner is responsible for representing the needs and priorities of the stakeholders, and for ensuring that the project delivers value to the business.
3. Project team: The project team, consisting of developers, designers, testers, and other relevant personnel, is responsible for verifying the scope of the project, and for raising change requests if necessary.
4. Stakeholders: Stakeholders, including customers, end-users, and other interested parties, are responsible for providing input on the requirements and scope of the project, and for approving scope changes as needed.

### **6.2.4 Scope Definition**

The scope of this project aims to address the issues faced by Mr. Jayvee Cabardo in using multiple tracking systems and checking various projects simultaneously. The project will focus on developing a system that enables Mr. Cabardo and other stakeholders, such as students, teachers, and consultants/advisors, to create and manage multiple student group projects simultaneously. The system will be implemented at Asia Pacific College (APC) and will ensure that projects are completed on time.

### **6.2.5. Project Scope Statement**

The project scope statement for the Tracking Activity project Management project will detail the project's deliverables and the work necessary to create these deliverables.

**Product Scope Description:**

The Tracking Activity Project Management System will be a comprehensive online tool that enables project managers to plan and track project activities, including task assignments, timelines, and resource allocation. It will also provide a centralized repository for project documentation and communication, including status reports, change requests, and issue logs. Additionally, the system will include robust reporting capabilities to facilitate progress monitoring and analysis of project performance.

The system will have tools for managing tasks and a calendar feature, along with reporting and analysis capabilities to enable managers to monitor both their own and their team's performance.

**Product Acceptance Criteria:**

The Tracking Activity Project Management System will be considered complete and accepted by the customer when it meets the following criteria:

1. All features and functionalities specified in the product scope description have been developed and tested using the test cases created by the Quality Assurance team.
2. The system has been successfully deployed within the Asia Pacific College (APC) environment.
3. The system has received positive feedback from users during the User Acceptance Testing (UAT) phase.
4. The system has been thoroughly documented and user manuals have been created to provide clear instructions for system use and maintenance.

**Project Deliverables:**

The following deliverables will be provided upon successful completion of the project:

1. Tracking Activity Project Management System with all features and functionalities specified in the Project Scope Description.
2. User manuals and training materials to guide the users of the system in its operation.
3. Technical documentation to facilitate maintenance and future upgrades of the system.
4. Any additional deliverables specified in the Project Scope Description and agreed upon by the Project Sponsor.

**Project Exclusions:** The following work is explicitly excluded from the scope of this project and will not be included:

1. Integration of any other system or software not explicitly mentioned in the project scope statement.
2. Customization or alteration of the system beyond the scope specified in the project scope statement.

**Project Constraints:** The successful completion of the project will be affected by the following constraints:

1. A restricted budget that may limit the project's scope and scale.
2. Limited availability of resources, including a limited workforce, which may affect the project's timelines and the ability to deliver specific features.

**Project Assumptions:** The following assumptions have been made regarding the Tracking Activity Project Management System:

1. The system will be implemented within the Asia Pacific College (APC) environment and will be accessible to authorized users within the network.
2. The developers who will work on this project are equipped with the necessary tools and resources to carry out the project's tasks.
3. APC has the necessary infrastructure and resources to support the project development, implementation, and maintenance of the system.
4. Indirect costs such as utilities and office space are covered in the contract between APC and the client and will not be taken out of the project budget.
5. All relevant data can be extracted from the previous tracking systems and transitioned to the new project management system.
6. The project has the full support of the project sponsor, stakeholders, and all departments involved, ensuring that necessary approvals and permissions for the project will be obtained in a timely manner.
7. The project timeline and budget are fixed and will remain unchanged throughout the duration of the project.
8. Users will have the necessary skills and knowledge to adapt to the new system effectively, and any required training and transition phase will be provided by the project team.

### **6.2.6. Work Breakdown Structure**

The Work Breakdown Structure (WBS) is a tool that will be used to divide the project into smaller, more manageable components. This hierarchical representation of the project scope will start with a high-level view of the project and progressively move down to a more detailed view. A companion document to the WBS, known as the WBS Dictionary, will provide detailed information about each component, including deliverables, scope of work, responsibilities, and other relevant information.

By using the WBS and WBS Dictionary, the project team will be able to assign responsibilities for each component of the project, track progress, and ensure that all aspects of the project are accounted for. The WBS and WBS Dictionary will also help to identify and resolve issues and keep the project on track and within scope. The project team recognizes that the WBS and WBS Dictionary are essential tools for managing the project scope and ensuring the project's success.

**TASKS:**

1. **Initiation**
   1. Define project goals and objectives.
   2. Identify project stakeholders and team members.
   3. Determine project scope and requirements.
   4. Create project plan and timeline.
   5. Set up Project Tracking Monitoring System.
2. **Planning**
   1. Create detailed project plan.
   2. Define project tasks and milestones.
   3. Create task board and assign tasks to team members.
   4. Create project schedule and timeline.
   5. Create budget and resource plan.
   6. Identify potential risks and create risk management plan.
   7. Create communication plan.
   8. Set up features in Project Tracking Monitoring System.
3. **Execution**
   1. Implement project plan and complete project tasks.
   2. Monitor project progress and adjust plan as needed.
   3. Use Task Board and File Sharing features to collaborate and share information with team members.
   4. Use Communication features to keep stakeholders informed of project status and progress.
4. **Control**
   1. Monitor project progress and performance.
   2. Use Reporting and Analytics features to track project metrics and performance.
   3. Adjust project plan and resources as needed to ensure project stays on track.
   4. Manage potential risks and issues.
   5. Use Communication to address conflicts or concerns among team members or stakeholders.
5. **Closeout**
   1. Complete final project tasks and deliverables
   2. Review project performance and outcomes
   3. Use Reporting and Analytics features to generate project reports and lessons learned.
   4. Archive project files and documents
   5. Conduct project review meeting with team members and stakeholders to discuss successes and areas for improvement.
   6. Close out project in Project Tracking Monitoring System

### **6.2.7. Scope Verification**

To ensure that the deliverables of the Tracking Activity Project Management System project align with the original project scope, the project team will employ various methods for scope verification. These methods will involve:

* Quality checklists: A list of specific requirements for each deliverable to be accepted. The project team will use these checklists to ensure that all deliverables meet the necessary criteria before proceeding.
* Work performance measurements: The project team will monitor and measure the progress of each deliverable during development. This will enable them to identify and resolve any potential issues or deviations from the original scope in a timely manner.
* Scope baseline: The project team will maintain a scope baseline, which is a snapshot of the original project scope. Any modifications to the scope must be documented and approved before they can be implemented. The scope baseline will be utilized to confirm that the final deliverables align with the original scope.
* Formal acceptance: The project sponsor, customer, and other stakeholders will formally accept each deliverable upon completion. This ensures that the project team meets the expectations of all relevant parties — allowing for any necessary feedback or changes to be made promptly.

Overall, constant communication and collaboration with the customer and other stakeholders is essential throughout the project to ensure that the deliverables align with the original scope and are accepted formally.

### **6.2.8 Scope Control**

The scope control process for the Tracking Activity Project Management System project will involve regular reviews of the project's deliverables and progress to ensure that they align with the original project scope as defined in the Project Scope Statement. Any deviations from the scope will be evaluated and, if necessary, changes to the scope will be documented and approved through the established scope change process. The Project Manager will be responsible for monitoring and controlling the project's scope, with assistance from the project team and stakeholders. Periodic reviews of the project's scope will be conducted to ensure that the project remains on track and within the defined boundaries. The project manager will also be responsible for ensuring that any scope changes are properly documented and that all impacted parties are notified of any changes.

**The scope control process for the Tracking Activity Project Management System project will involve the following steps for making changes to the scope baseline:**

1. A scope change request will be initiated by any stakeholder or team member who identifies a need for a change to the scope.
2. The scope change request will be reviewed by the Project manager and the Project Sponsor to assess the impact of the change on the project schedule, budget, and resources.
3. If the change is deemed low impact, the Project Manager can approve or deny the request. If the change is deemed high impact, the Project manager can approve or deny the request. Any low impact change request approved or denied by the Project Manager can be reviewed and overruled by the Project Sponsor.
4. If the request is approved, the Project Manager will create an action plan to proceed with the change, update the scope baseline, and notify all relevant stakeholders of the change.
5. If the request is rejected, the project team will continue with the original scope.
6. It is important to have a formalized process for making changes to the scope baseline to ensure that the Tracking Activity Project Management System project stays on track and within budget. Any changes to the scope should be carefully assessed and approved to avoid scope creeps and keep the project on track.

## **6.3. Cost Management Plan**

### **6.3.1 Cost Management Approach**

The cost management approach for the tracking activity project management system project will be based on these approaches including:

* 1. Cost Estimates: - The team will develop cost estimates for the various activities and tasks that can help to detect potential cost overruns and give a starting point for monitoring actual costs as the project moves forward.
  2. Resource Allocation: - Properly distributing resources can contribute to cost reduction by ensuring that resources are being used effectively and efficiently.
  3. Budgeting: - Making a budget that aligns with cost estimates can ensure that the project remains financially on course.
  4. Risk Management: - Managing risks that could impact project costs is another salient aspect of cost management. This involves developing an approach to risk management as well as maintaining updated on prospective risks throughout the project lifecycle.
  5. Cost Reporting: - The project team will report regularly the project costs and progress within the budget, which can assist in identifying problems early on and give the project team the knowledge they need to make wise decisions regarding cost management.

By adopting these approaches, the project team may efficiently manage expenses for a project that concentrates on tracking activity project management by implementing these measures, ensuring that the project remains on track financially.

### **6.3.2 Measuring Project Cost**

The Project Tracking Monitoring System (TAPM) cost almost nothing and involved the creation of software using Laravel and Visual Studio, as well as GitHub, we will use Man-hours and hourly rate to measure and control our project costs.

**To estimate the cost of the project based on the given information, you can use the following formula:**

**Total Cost = Number of Man-Hours \* Hourly Rate Assuming a junior programmer salary of 375 Pesos per hour, the cost of the project can be estimated as follows:**

**Total Number of Man-Hours = 40 hours/week \* 13 weeks = 520 Hours Total Cost = 520 Hours \* 375/hour = 195000**

So, the estimated cost of the project based on man-hours and junior programmer salary is 195000 Pesos. However, please note that this is only an estimate, and the actual cost may vary based on factors such as project complexity, resource utilization, and unforeseen events.

To forecast future project costs, we will review cost performance over time and across work packages or schedule activities. This will help us identify any potential cost overruns or deviations from our project plan. By measuring and monitoring our project costs, we can ensure that we stay on track and deliver our project within budget.

## **6.4 Schedule Management Plan**

### **6.4.1 Introduction**

Effective schedule management is essential for any project to succeed. The schedule management plan serves as a critical tool for project managers to ensure that projects are completed on time, within budget, and with the required quality standards. The plan outlines the approach, methods, and tools that will be used to develop and manage the project schedule. It defines the roles and responsibilities of the project team members involved in schedule management, and it establishes the procedures for monitoring and controlling schedule progress. In this document, we will provide a general description of the items that should be included in the schedule management plan. These items will be described in more detail in subsequent sections of the plan, where we will outline specific procedures and techniques for managing the project schedule.

### **6.4.2. Schedule Management Approach**

**a. Scheduling Tool**

The scheduling tool that the team used is Project Libre. Showed below are the milestones and schedules of the team in making the project documents and system.



Figure 1 Project Scheduling Tool Part 1



Figure 2 Project Scheduling Tool Part 2

**b. Roles and Responsibilities**

Shown below are the roles and responsibilities of the members in creating this project.

|  |  |  |
| --- | --- | --- |
| NAMES | ROLES | RESPONSIBILITES |
| Mr. Jayvee Cabardo | Project Adviser | Gave ideas for improvement and shared knowledge regarding the project. |
| Noreen Keziah Sioco | Project Leader | In charge of leading the team in creating the project. |
| Joseph Adrian Lebag | Front-end Programmer | In charge of programming the front-end of the system. |
| Jose Norberto Verde | Back-end Programmer | In charge of programming the back end of the system. |
| Mark Gerald Giba | UX/UI Designer | In charge of creating the system’s design. |
| Bea Angeline Cruz | Documentation | In charge of documenting the projects process. |

Table 9 Project Roles and Responsibilities

### **6.4.3. Schedule Control**

|  |  |
| --- | --- |
| **PLAN** | **SCHEDULE** |
| Project Start | June 7, 2022 |
| Project Client Search | June 9, 2022 |
| Project Document | June 11, 2022 |
| Project Design | January 6, 2023 |
| Project System | January 9, 2023 |
| Project Presentation | February 4, 2023 |
| Business Case | April 20, 2023 |
| Project Charter | April 21, 2023 |
| Stakeholder Analysis | April 21, 2023 |
| Scope Management Plan | May 2, 2023 |
| Cost Management Plan | May 2, 2023 |
| Time Management Plan | May 2, 2023 |
| Work Breakdown Structure | May 2, 2023 |
| Project Management Documentation | May 3, 2023 |

Table 10 Schedule Control

### **6.4.4. Schedule Changes and Thresholds**

|  |  |  |
| --- | --- | --- |
| **PLAN** | **SCHEDULE** | **POSSIBLE CHANGES** |
| Project Start | June 7, 2022 | This may not be a feasible start date depending on the availability of resources and stakeholders. You may need to adjust this date to a later time if  necessary. |
| Project Client Search | June 9, 2022 | No possible changes. |
| Project Document | June 11, 2022 | Changes if the project will continue. |
| Project Design | January 6, 2023 | Depending on the complexity of the project, the design phase may take longer than expected. You may need to extend the duration of this phase.  or allocate more resources to it. |
| Project System | January 9, 2023 | Similar to the design phase, the system phase may require more time or resources.  depending on the project's complexity.  You may need to adjust the timeline accordingly |
| Project Presentation | February 4, 2023 | The presentation date may need to be adjusted if any of the preceding tasks take  longer than expected. |
| Business Case | April 20, 2023 | The business case may need to be revisited and updated throughout the project. You may need to allocate more time for this task or schedule  multiple reviews. |
| Project Charter | April 21, 2023 | The project charter may need to be revised based on the project's progress or changes in scope. You may need to allocate more time for this task or schedule multiple reviews. |
| Stakeholder Analysis | April 21, 2023 | Similar to the project charter, the stakeholder analysis may need to be revisited and updated throughout the project. You may need to allocate more time for this task or schedule multiple reviews. |
| Scope Management Plan | May 2, 2023 | The scope management plan may need to be revised based on the project's progress or changes in scope. You may need to allocate more time for this task or schedule multiple reviews. |
| Cost Management Plan | May 2, 2023 | The cost management plan may need to be revised based on the  project's progress or changes in budget. You may need to allocate more time for this task  or schedule multiple reviews. |
| Time Management Plan | May 2, 2023 | The time management plan may need to be revised based on the project's progress or changes in schedule. You may need to allocate more time for this task or schedule multiple reviews. |
| Work Breakdown Structure | May 2, 2023 | The work breakdown structure may need to be revised based on the project's progress or changes in scope. You may need to allocate more time for this task or schedule multiple reviews. |
| Project Management Documentation | May 3, 2023 | Depending on the scope of the project, the project management documentation may require more time or resources. You may need to adjust the timeline accordingly. |

Table 11 Schedule Changes and Thresholds

### **6.4.5. Scope Change**

The project has undergone approved changes that are all related to the system and its functionality. These changes include the addition of a space bar and the capability to add subtasks to the system. The primary aim of these changes is to enhance the usability and functionality of the system. Overall, the approved changes are expected to improve the user experience and the efficiency of the system, which will ultimately contribute to the success of the project.

## **6.5. Staffing Management Plan**

### **6.5.1. Introduction**

Any project's success depends on a solid management plan. It helps to ensure that the right people with the correct qualifications are in the right place at the right time and serves as a model for how the project team will be managed and organized. The strategy includes roles and responsibilities, communication procedures, and performance management standards. With the help of this plan, the project manager and project team can manage the project in an efficient manner, making sure that everyone on the team is aware of their duties and responsibilities, that communication is clear and effective, and that performance is tracked and managed in a way that supports the project's success as a whole.

### **6.5.2. Roles and Responsibilities**

Any project must have a strong management plan in place to be successful. To ensure that everyone is aware of their particular contributions and how they fit into the larger picture, it explains the roles and responsibilities of all project team members and stakeholders. The plan also specifies each team member's level of authority and decision-making capacity, ensuring that resources are distributed and used efficiently. The strategy guarantees that the right people are in the right roles to accomplish project success by explicitly identifying competences and skill needs.

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Authority** | **Responsibility** | **Competency** |
| Project  Sponsor | Authorize the business case and budget for the project. offers resources and a clear strategic direction. | Ensures the success of a project. Provides leadership, support, and guidance throughout the project lifecycle. Assist in updating the company on the status and advantages of the project. | Ability to successfully communicate with a variety of stakeholders. Strong leadership and strategic thinking abilities. comprehensive knowledge of the organization's mission, objectives, and values.  Possibility of obtaining funding and assistance for the project. |
| Project  Manager | Complete power to make decisions on the project.  can distribute project resources and provide the go-ahead for low-impact adjustments to the project's scope, timetable, and budget. | Controls and oversee all aspects of the project, including its planning, implementation, monitoring, and closeout.  Make that the project's goals are attained on schedule, within budget, and with the appropriate level of quality. | Exceptional communication, project management, and leadership abilities. experience in difficult project management. |
| Internal  User of the  System (Abyss Team) | Employs the system as intended to carry out job tasks.  feedback on the system's performance, usefulness, and usability. | Utilize the system as intended to complete job tasks.  Check the precision and completeness of the data.  To the project team, report any systemic difficulties and concerns.  Let us know your thoughts on the performance, functionality, and usefulness of the system. | knowledge about the tasks and activities that the system is being utilized for.  having the knowledge necessary to carry out the prescribed work duties.  basic computer knowledge, including competence with the system. |
| External  Users of the  System (PDO) | Receives service requests, logs in, and utilizes the system to process them.  changes the status of a service request. | Monitoring and responding to service requests quickly. Maintain accurate and current data on service request standings. When necessary, communicate with internal stakeholders to finish service requests. Close out service requests that have been fulfilled. | Understanding of the processes, tools, and resources needed to fulfill service requests.  the capacity to recognize and resolve technological problems. Understanding the significance of keeping the system's data correct and up to date. |
|  | Reviews, accepts, or rejects service requests using the system that is accessed and used. Service requests are assigned to internal or external technicians. information on the status and fulfilment of service requests. | Upon reviewing the requests, decide whether to accept or reject them in accordance with corporate goals and policies.  In accordance with their qualifications and availability, assign service requests to internal or external technicians.  Customers and internal stakeholders should be informed of the status and progress of service requests. | Understanding of the organization's priorities and policies for service requests.  the capacity to allocate and rank work tasks in accordance with technician expertise and availability.  Recognizing the significance of accurate and prompt reporting on the status and completion of service requests. |

Table 12 Staffing Management Roles and Responsibilities

### **6.5.3 Project Organizational Charts**

An organizational chart for a Project Tracking and Monitoring System provides a visual representation of the project team's structure and the reporting relationships within the project. It outlines the roles and responsibilities of the team members involved in tracking and monitoring the progress of the project. The chart helps to establish clarity, define accountability, and facilitate effective communication within the project team. At the top of the organizational chart is typically the project sponsor, who serves as the overall champion and provides strategic guidance for the project. Reporting directly to the sponsor is the project manager, who is responsible for overseeing the entire project and ensuring its successful execution. Below the project manager, there may be various functional roles involved in the tracking and monitoring of the project.

A diagram of a company

Description automatically generated with low confidence

Figure 3 Project Organizational Charts

### **6.5.4 Staffing Management**

Staffing management for a Project Tracking and Monitoring System involves identifying, acquiring, and managing the right personnel with the necessary skills and expertise to develop, implement, and maintain the system.

* Assign a skilled project manager who will oversee the entire project, coordinate activities, and ensure that project goals are achieved within the defined scope, budget, and timeline.
* Identify and recruit technical experts who specialize in areas relevant to the Project Tracking and Monitoring System. This may include software developers, database administrators, system analysts, UI/UX designers, and quality assurance testers.
* Determine the level of user support required for the Project Tracking and Monitoring System. This may involve assigning dedicated support staff who can address user queries, provide training, and troubleshoot issues that arise during system usage.
* Regularly evaluate the performance of the project team members to ensure that they are meeting project expectations and objectives. Provide feedback, support professional development, and address any performance issues that may arise.

To keep it in line with the goals and needs of the project, the Staffing Management Plan will be periodically reviewed and revised as required. The project manager must carefully examine the rules and specifications that apply to the project in question to see whether any other elements need to be included in the workforce management strategy.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Role** | **Project responsibility** | **Skills Required** | **Number of Staff** | **Performance Reviews** | **Recognition and Awards** |
| Project Manager | Overall accountability for project success, including meeting project objectives, delivering within budget and timeline, and ensuring stakeholder satisfaction.  Responsible for project planning, execution, monitoring, and control.  Identifying and managing project risks, issues, and changes.  Ensuring effective communication and collaboration among project team members and stakeholders.  Adhering to organizational policies, standards, and methodologies. | Excellent leadership  Team management skills  Strong communication  Negotiation  Conflict resolution abilities  Risk management  Decision-making skills  Stakeholder management  Relationship building skills | The number of staff required depends on the project's complexity, scope, and scale.  Assess the specific project requirements and determine the necessary roles and responsibilities.  Consider the expertise needed in areas such as development, testing, design, and support.  The project manager may need additional staff for project coordination, administration, and documentation. | Successful completion of project deliverables within the defined timeline, budget, and quality standards.  Achievement of project objectives and stakeholder satisfaction.  Effective utilization and management of resources.  Ability to adapt to changing project requirements and mitigate risks. | Recognition for successful project completion and meeting project objectives.  Acknowledgment of exceptional leadership and management skills.  Awards for successful implementation, innovation, or cost savings achieved through the project.  Recognition for overcoming challenges and delivering exceptional results. |
| Project Team Leader | Lead and manage the project team, ensuring the successful execution of project goals and objectives.  Coordinate and oversee project activities, including planning, resource allocation, and task delegation.  Foster collaboration and effective communication among team members and stakeholders. | Strong leadership  Team management abilities  Excellent communication  Time management skills | The required number of staff for a project team leader can vary depending on the project's size, complexity, and scope.  Typically, a project team leader may oversee a team of 5-15 members, but this can vary significantly. | Conduct regular performance reviews for team members to assess their progress, achievements, and areas for improvement.  Provide constructive feedback and guidance to help team members enhance their performance.  Set performance goals and objectives aligned with the project's objectives and track progress towards them. | Acknowledge and recognize team members' efforts and achievements through verbal praise and written commendations.  Provide opportunities for team members to showcase their work and achievements to stakeholders and senior management.  Consider nominating exceptional team members for awards and recognition programs within the organization. |
| Project Team Member | Work together with other team members to accomplish project objectives.  Notify the project manager or leader how things are going. Attend project meetings and participate in discussions.  To guarantee that project activities are performed on schedule and within budget, employees must properly manage their time and work. | Technical expertise: Relevant technical skills and knowledge related to the project domain.  Communication: Strong verbal and written communication skills to effectively collaborate with team members, stakeholders, and clients.  Problem-solving: Ability to analyze and solve problems that arise during project execution.  Time management: Ability to prioritize tasks, meet deadlines, and manage time efficiently. | The required number of project team members can vary depending on the project's size, complexity, and scope. | The requirements of the project and the company's regulations will be used to decide the frequency and type of performance evaluations. | To inspire team members and promote good performance, the project manager or leader will put in place a recognition and incentive system. |
| Executive Sponsor | Providing strategic direction and guidance to the project team.  Ensuring alignment of the project with organizational goals and objectives.  Championing the project and securing necessary resources.  Managing relationships with key stakeholders.  Overseeing the project's progress and intervening as needed. | Strong leadership and management skills.  Excellent communication and interpersonal skills.  Strategic thinking and problem-solving abilities.  Knowledge of project management principles and practices.  Ability to influence and negotiate with stakeholders. | The number of project executive sponsors can vary depending on the size and complexity of the project, as well as the organization's structure. | Performance reviews for project executive sponsors typically involve evaluating their overall effectiveness in guiding and supporting the project.  Assessments may consider factors such as strategic alignment, stakeholder management, resource allocation, decision-making, and project outcomes. | Recognizing and awarding project executive sponsors can serve as a way to acknowledge their significant contributions and demonstrate appreciation for their efforts.  Awards can be given based on exceptional leadership, successful project outcomes, effective stakeholder management, or other specific criteria. |

Table 13 Staffing Management

## **6.6. Change Management Plan**

### **6.6.1. Introduction**

A well-structured plan for managing changes is essential to ensure the successful implementation of any project, such as the Tracking Activity Project Management system. This plan provides a systematic approach to identify, assess, and implement changes that may arise throughout the project. It guarantees that any alterations are thoroughly evaluated, align with the project's scope, and effectively communicated to all stakeholders.

The change management strategy includes a clear process for submitting, evaluating, and approving changes. This process is shared with all stakeholders, who are encouraged to request any modifications they deem necessary. The project team then evaluates these requests, considering their impact on the project's schedule, cost, and quality. Approved changes are executed in a controlled and organized manner, while rejected changes are documented and retained for future reference.

It is crucial to note that making alterations outside of the change management strategy can negatively affect the project's progress and outcome. Therefore, it is essential for all stakeholders to understand and adhere to the change management process. This adherence guarantees that the project stays on track and that any adjustments made contribute to the overall success of the project.

### **6.6.2. Change Control Board**

The Change Control Board comprises a specific group of stakeholders who are accountable for approving or rejecting changes related to the Tracking Activity Project Management System. The following table provides a concise overview of each individual who serves on the Change Control Board:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Change**  **Control**  **Board**  **Role** | **Role** | **Name** | **Contact** | **Responsibilities** |
| Change  Control  Board  Chair | Project Sponsor | Jayvee Cabardo | [jayveec@apc.edu.ph](mailto:jayveec@apc.edu.ph) | Make decisions on whether to authorize or reject significant changes.  Hold the authority to assess low-impact changes and can reverse decisions made by the Project Manager regarding change requests. |
| Change Control  Board  Member | Project  Manager | Noreen Keziah Sioco | [nssioco@apc.edu.ph](mailto:nssioco@apc.edu.ph) | Evaluate the extent of impact caused by a change request, categorizing it as either high or low.  Authorize or reject low-impact changes.  Take responsibility for devising an implementation plan for approved change requests. Communicate the necessary steps for implementing the changes. Update the project's plan, budget, and schedule accordingly. |
| Change  Control  Board  Member | Change  Coordinator | Jose Norberto Verde | [jtverde@student.apc.edu.ph](mailto:jtverde@student.apc.edu.ph) | Guarantees the effective implementation of the Change Management process.  Takes responsibility for accurately updating the change logs.  Compiles the Change Status Report.  Generates a monthly report that provides an overview of the status of the items listed in the change control logs. |

Table 14 Change Control Board

### **6.6.3. Roles and Responsibilities**

The table below shows the respective responsibilities of each member of the project that in the change management process:

|  |  |  |
| --- | --- | --- |
| **Name** | **Project Role** | **Responsibilities** |
| Jayvee Cabardo | Project Sponsor | Oversee all change requests made throughout the project and ensure that any high-impact requests are promptly addressed.  Monitor the Project Manager's determinations regarding low-impact requests.  Submit a change request if deemed necessary.  Review the change request log and reports to ensure consistency with the implemented changes. |
| Project Development Office | External User of the System | Submit a change request if deemed necessary.  Review the change request log and reports to ensure consistency with the implemented changes. |
| Noreen Keziah Sioco | Project Manager | Submit a change request if deemed necessary.  Review the change request log and reports to ensure consistency with the implemented changes.  Conduct an impact analysis for each change request received to distinguish between low-impact and high-impact change requests. This analysis will also assist the Project Sponsor in making decisions regarding high-impact requests. |
| Development Team | Developers | Carry out the technical aspects of the action plan for implementing the change request.  Evaluate the change request log and reports to verify consistency with the implemented changes. |

Table 15 Change Request Roles and Responsibilities

### **6.6.4. Change Control Process**

The Change Management process sets forth a systematic and efficient method for managing the submission, coordination, review, evaluation, categorization, and approval of all changes to the project's baselines. The table provided below illustrate the agreed-upon process flow for change requests (CR) within the team.

|  |  |  |
| --- | --- | --- |
| **Process Step** | **Description** | **Change Log Status** |
| Change Request Submittal | 1. The individual requesting the change (Requestor) completes and submits the change request form to initiate the request. If the Requestor is unsure about how to properly fill out the form, the Project Manager provides guidance and assistance in completing the Change Request form. | Submitted |
| Analyze Impact of the Change Request | 1. Upon receiving the change request, the Project Manager evaluates its impact, considering factors such as scope, schedule, budget, and quality. Based on this assessment, the Project Manager determines whether the impact is high or low and identifies the necessary actions for implementation.  2. If the impact of the change request is determined to be high, the Project Manager proceeds to prepare a recommendation for approval or denial based on the findings from the impact analysis. The Project Sponsor then reviews the change request, the Project Manager's impact analysis, and the recommendation. On the other hand, if the impact is low, the Project Manager has the authority to approve or deny the change request.  3. The Change Coordinator is responsible for updating the Change Log and generating a Change Status Report. | In Review |
| Approve or Deny Change Request | Approval of the change request is dependent on the impact it has on the project:  For low-impact changes:   1. If the change request is classified as low-impact, the Project Manager has the authority to approve or deny the request.    1. If approved, the Project Manager proceeds with the "Implement Change Request" phase.    2. If denied, the change request is considered closed. 2. The Change Coordinator is responsible for updating the Change Log and generating a Change Status Report.   For high-impact changes:   1. If the change request is categorized as high-impact, the Project Sponsor has the sole authority to approve or deny the request.    1. If approved, the Project Manager proceeds with the "Implement Change Request" phase.    2. If denied, the change request is considered closed. 2. The Change Coordinator updates the Change Log and creates a Change Status Report. | Approved or denied |
| Implement Change Request | 1. Once the change log is updated to "Approved," the Project Manager proceeds to develop an action plan for implementing the change request.  2. After finalizing the action plan, the Project Manager communicates it to the relevant team members and assigns responsibilities accordingly.  3. The Project Manager then updates the project plan, budget, and schedule as necessary to accommodate the approved change.  4. The Change Coordinator is responsible for updating the Change Log and generating a Change Status Report. | In Progress |
| Verify Implementation of Change Request | 1. The Project Manager verifies the implementation of the change and reports the status to the Change Control Board.  2. The Change Coordinator updates the Change Log and generates a Change Status Report. | Verifying |
| Change Request Closure | 1. The Change Coordinator distributes the final Change Status Report to the entire team and stakeholders. | Closed |

Table 16 Change Request Process

In order to monitor the progress of change requests, each step is associated with a specific change request status, as illustrated in the table below:

|  |  |
| --- | --- |
| **Status** | **Description** |
| Submitted | A change request has been logged by a member of the project development team or key stakeholders and is awaiting review by the Project Manager for impact analysis. |
| In Review | Impact analysis is currently being conducted on the change request. |
| Approved | The change request has been approved and will proceed to the implementation phase. |
| Denied | The change request has been denied and will not be implemented. |
| In Progress | The action plan to execute the change request is currently being implemented. |
| Verifying | The proper implementation of the change request is being reviewed and assessed. |
| Closed | The change request work is considered complete. It has undergone all necessary tests and updates have been released. |

Table 17 Change Request Status Description

## **6.7. Communications Management Plan**

### **6.7.1. Introduction**

The Communications Management Plan plays a vital role in the Tracking Activity Project Management System by outlining the communication strategy and protocols for the project team and stakeholders. The plan encompasses the following key aspects:

1. Information Scope and Format: The plan defines the type of information to be communicated, such as project updates, progress reports, risks, and issues. It also specifies the level of detail and format for communication, whether verbal or written.
2. Communication Methods: The plan outlines the communication channels to be used, including meetings, email, telephone, web portal, etc. This ensures that stakeholders receive timely and appropriate information.
3. Communication Frequency: The plan establishes the frequency of project communications, both formal and informal, to ensure stakeholders are regularly informed.
4. Roles and Responsibilities: The plan clarifies the roles and responsibilities of team members and stakeholders in terms of communication, specifying who is responsible for disseminating project information.
5. Stakeholder Communication Needs: The plan identifies the specific communication requirements of stakeholders, considering factors such as language preferences and accessibility.
6. Communication Resources: The plan allocates resources, such as budget and personnel, to ensure effective and efficient communication.
7. Handling Sensitive Information: The plan defines protocols for communicating sensitive or confidential information, including the authorization process for releasing such information.
8. Change Management in Communication: The plan outlines a process for managing changes in communication or the communication process, including proposal, review, and approval. This ensures stakeholders are aware of changes and maintains consistency.
9. Communication Flow: The plan describes the flow of communication within the project, ensuring information is shared between team members, stakeholders, and partners in a timely manner.
10. Constraints: The plan identifies any internal or external constraints affecting project communication, such as legal or regulatory requirements, and outlines how these constraints will be addressed.
11. Standard Templates and Formats: The plan specifies any required templates, formats, or documents for communicating project information, ensuring consistency and accuracy.
12. Conflict Resolution: The plan includes an escalation process for resolving communication-related conflicts or issues promptly.

Overall, the Communications Management Plan is a crucial tool that ensures stakeholders are well-informed and facilitates effective and efficient communication throughout the Tracking Activity Project Management System.

### **6.7.2. Communication Management Approach**

The most effective communications management approach for the Tracking Activity Project Management System would involve a combination of proactive and reactive strategies.

Proactive Strategies:

1. Regular Project Status Meetings: Conducting regular meetings to update stakeholders on the project's progress, where the project manager communicates updates, progress reports, risks, and issues. This keeps stakeholders informed and provides an overview of the project's status.
2. Project Website and Web Portal: Creating a dedicated project website or web portal to facilitate easy access to project information, including meeting minutes, documents, and status reports. This allows stakeholders to stay informed and access relevant information conveniently.

Reactive Strategies:

1. Clear Escalation Process: Establishing a well-defined and concise escalation process to address any communication-based conflicts or issues that may arise. This ensures that conflicts are addressed promptly and effectively, and stakeholders can seek resolution for their concerns.
2. Accessible Project Manager: The project manager being readily available to stakeholders, offering support, guidance, and promptly addressing any questions or concerns they may have. This availability fosters effective communication and ensures stakeholders feel supported throughout the project.

In addition, a change control process will be implemented to manage any changes in communication or the communication process itself. This involves obtaining approval from the Change Control Board for any communication-related changes and ensuring timely communication to stakeholders about these changes.

By combining these proactive and reactive strategies, the approach ensures that stakeholders and the project team are well-informed, communication-based issues are addressed promptly, and any changes in communication are managed effectively. This approach contributes to efficient and effective project communication and overall project success.

### **6.7.3. Communication Management Constraints**

The constraints related to communications management in the Tracking Activity Project Management system are essential considerations within the overall project management plan. These constraints outline the limitations and factors that can impact the project's communication processes and strategies. By recognizing and addressing these constraints, the project team can proactively develop solutions to mitigate potential challenges and ensure smooth information flow throughout the project.

The following are key constraints that may impact the project's communication processes:

1. Limited Communication Budget: The project may have budgetary constraints that limit the allocation of resources for communication tools and resources, such as video conferencing software, project management software, or dedicated communication personnel.
2. Restricted Stakeholder Access: Certain stakeholders may be geographically dispersed or have limited access to specific communication channels, such as email or the internet. This constraint may require alternative communication methods to ensure effective stakeholder engagement.
3. Team Member Availability: Team members may have conflicting commitments or responsibilities, limiting their availability for communication. Scheduling regular communication meetings and finding suitable time slots can be challenging.
4. Language Barriers: If team members or stakeholders speak different languages, language barriers can impede effective communication. Additional resources or translation services may be necessary to facilitate smooth communication.
5. Confidentiality Requirements: The project may involve sensitive information that requires adherence to confidentiality protocols and secure communication channels. This constraint necessitates the implementation of appropriate communication measures to protect confidential data.
6. Resistance to Change: Some stakeholders may exhibit resistance to changes in communication processes or tools. Overcoming resistance and fostering acceptance of new communication strategies can be a constraint that requires careful change management efforts.
7. Technical Challenges: Technical difficulties with communication tools, systems, or connectivity can hinder effective communication. Addressing and resolving these technical issues is crucial to ensure smooth communication flow.
8. Time Constraints: The project's tight deadlines and time-sensitive nature may create challenges in scheduling and conducting regular communication meetings. Efficient time management and concise communication methods can help overcome this constraint.

By recognizing and addressing these constraints, the project team can develop strategies and contingency plans to mitigate their impact and ensure effective communication throughout the Tracking Activity Project Management system.

### **6.7.4. Stakeholder Communication Requirements**

The stakeholder communication requirements for the Tracking Activity Project Management system are crucial for ensuring effective and efficient communication throughout the project. These requirements address the specific needs and expectations of stakeholders, enabling the project team to establish a successful communication strategy. The following stakeholder communication requirements can be identified:

1. Regular Project Updates: Stakeholders should receive regular updates on the project's progress, including any challenges, milestones, or changes that may impact them.
2. Clear and Concise Communication: All project-related information should be communicated in a clear and concise manner to ensure understanding and avoid confusion.
3. Accessibility: Communication should be accessible to all stakeholders, taking into account language requirements, cultural considerations, and any accessibility needs.
4. Timely Communication: Information should be communicated in a timely manner, ensuring that stakeholders receive relevant updates when needed and allowing them to make informed decisions.
5. Confidentiality: Sensitive or confidential information should be communicated only to the appropriate stakeholders, following established protocols to maintain confidentiality and security.
6. Customized Communication: Communication should be tailored to the specific needs and preferences of each stakeholder, considering their level of involvement, roles, and responsibilities in the project.
7. Two-Way Communication: Communication should facilitate a two-way exchange of information, encouraging stakeholders to provide feedback, ask questions, and share their perspectives.
8. Feedback Mechanisms: Mechanisms should be established for stakeholders to provide feedback on the communication process, allowing for continuous improvement and addressing any concerns or issues that may arise.

By addressing these stakeholder communication requirements, the project team can foster effective collaboration, manage expectations, and ensure that stakeholders are well-informed and actively engaged throughout the project lifecycle.

### **6.7.5. Roles**

|  |  |
| --- | --- |
| **Roles** | **Responsibilities** |
| Project Sponsor | This role is held by a high-level executive who provides strategic direction for the project. The Project Sponsor ensures that the Tracking Activity Project Management System aligns with the organization's overall goals and objectives. They provide support, guidance, and decision-making authority throughout the project. They also oversee the system and ensures its alignment with other related projects within the organization. They are responsible for the overall success of the program and provide strategic direction and coordination. The Project Sponsor ensures that the project meets its objectives and delivers the intended benefits. |
| Project Manager | The Project Manager is responsible for the planning, execution, and closure of the Tracking Activity Project Management System. They lead the project team, coordinate activities, and ensure that the project is completed within the defined timeline, budget, and quality standards. The Project Manager manages risks, resources, and stakeholder expectations while maintaining effective communication with all project participants. |
| Development Team | The Development Team consists of individuals responsible for the technical aspects of the Tracking Activity Project Management System. They are involved in system architecture, database design, software development, and other technical aspects. The Development Team ensures that the system meets the required technical specifications, standards, and addresses scalability, security, and reliability requirements. |
| Key Stakeholders | These individuals or groups have a vested interest in the Tracking Activity Project Management System. They may include the PDO, members of the faculty, and the students who rely on the system for their daily operations. Key stakeholders actively participate in project planning, decision-making, and provide input on requirements, priorities, and project outcomes. |

Table 18 Communication Management Roles and Responsibilities

### **6.7.6. Project Team Directory**

The following table contains the contact details of individuals identified in the communications management plan. The provided email addresses and phone numbers will serve as the means to communicate with these individuals.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Position** | **Internal/**  **External** | **Project Role** | **Contact Information** |
| Jayvee Cabardo | Director of Project Development | Internal | Project Sponsor | [jayveec@apc.edu.ph](mailto:jayveec@apc.edu.ph) |
| Noreen Keziah Sioco | Head of Development Team | Internal | Project Manager | [nssioco@apc.edu.ph](mailto:nssioco@apc.edu.ph) |
| Project Development Office | Client | External | External User of the System | - |
| Roselle Wednesday Gardon | Consultant | External | External User of the System | [roselleg@apc.edu.ph](mailto:roselleg@apc.edu.ph) |
| Team Abyss | Development Team | Internal | Internal User of the System | - |

Table 19 Project Team Directory

### **6.7.7. Communication Methods and Technologies**

To effectively communicate with stakeholders in the Tracking Activity Project Management System, it is crucial to have a comprehensive understanding of various communication methods and technologies. It is important to assess the capabilities and limitations of each method to ensure timely and efficient delivery of information to stakeholders. This involves selecting appropriate methods for sharing project updates, progress reports, risks, issues, and other relevant details. Consideration should also be given to the cost, feasibility, security, and privacy aspects of different communication technologies. By carefully choosing the most suitable methods and technologies, the project team can achieve their communication objectives and keep stakeholders well-informed.

When deciding on the most suitable communication methods and technologies for the Tracking Activity Project Management System, several factors should be taken into account:

* Project size and complexity: For large and complex projects, utilizing web portals and project management software can centralize information and provide easy access to all stakeholders.
* Stakeholder locations: If stakeholders are geographically dispersed, real-time communication methods like video conferencing and telephone can facilitate effective communication.
* Stakeholder technical expertise: Simple communication methods such as email and telephone are preferable for stakeholders who may not be technologically proficient.
* Nature of the information: When dealing with sensitive or confidential data, secure communication methods like encryption and password-protected portals should be used.
* Budget and resources: The chosen communication methods and technologies should align with the project's budget and available resources.

Considering these factors, it is advisable for the Tracking Activity Project Management System to employ a combination of communication methods and technologies such as project management software, email, telephone, and video conferencing. This approach ensures that all stakeholders remain informed and that the project's communication objectives are successfully met.

### **6.7.8. Communications Matrix**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Channel** | **From** | **To** | **Type** | **Frequency** | **Format Used** | **Delivery Media** |
| Project Planning | Project Manager | Stakeholders | Meeting | Once before the start of the Project | Formal | Email |
| Release Planning | Project Manager, Project Team | Stakeholders | Meeting | Once before the start of the Project.  Updated when necessary | Formal | Email |
| Sprint Planning | Project Manager | Project Team | Meeting | Once every Week | Informal | Teams |
| Management Process | Project Manager, Project Team | Stakeholders | Artifact | Once before the start of the Project.  Updated when necessary | Written Document | Email, Teams |
| Product Backlog | Project Manager | Project Team | Artifact | Once every Week | Written Document | Teams |
| Project Update | Project Manager | Project Team | Meeting | Once every Week | Informal | Teams |

Table 20 Communication Matrix

### **6.7.9. Communication Flowchart**

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Figure 4 Communication Flowchart

### **6.7.10. Guidelines for Meetings**

Meetings play a crucial role in facilitating effective communication within the Tracking Activity Project Management System. To ensure their productivity, efficiency, and effectiveness, it is essential to establish clear guidelines for conducting meetings. These guidelines should encompass the following aspects:

1. Purpose of meetings: Clearly define the objectives and intended outcomes of each meeting, whether it is to share project updates, make decisions, address issues, or seek input from stakeholders.
2. Roles and responsibilities: Outline the roles and responsibilities of attendees, including the project manager, team members, stakeholders, and any specific facilitators or presenters. This ensures that everyone understands their roles and actively contributes to the meeting.
3. Meeting procedures: Define the procedures that will be followed during meetings, such as the format, agenda creation and distribution, meeting duration, and rules for participation. This helps establish a structured framework and promotes efficient use of meeting time.
4. Preparation and participation: Encourage attendees to come prepared by reviewing pre-meeting materials, bringing relevant information or documents, and actively participating in discussions. Emphasize the importance of active listening, respectful communication, and constructive contributions.
5. Documentation and follow-up: Specify the process for documenting meeting minutes, action items, and decisions. Define how these will be shared with attendees and stakeholders, ensuring that everyone has access to accurate and up-to-date information. Assign responsibility for following up on action items and tracking their progress.

By establishing these clear meeting guidelines, the project team and stakeholders can be better prepared, actively engage in discussions, and ensure that meetings are conducted in a consistent and organized manner. This fosters effective communication, minimizes confusion, and enhances the overall success of the Tracking Activity Project Management System.

### **6.7.11. Communication Standards**

The recommended communication standards for the Tracking Activity Project Management system are as follows:

1. Standardized Templates: Creating standardized templates for project communications, such as status reports, meeting agendas, and minutes, promotes consistency and clarity in the information shared among team members and stakeholders.
2. File Naming Convention: Establishing a standard file naming convention for project documents and files ensures easy access and organization of information. Consistent naming conventions facilitate efficient searching and retrieval of important project-related documents.
3. Web Portal/Network Tool: Utilizing a centralized platform like SharePoint or project management software can enhance communication and collaboration among team members and stakeholders. Such tools provide a common space for sharing documents, updates, and discussions, improving access to information and fostering collaboration.
4. Video Conferencing: Leveraging video conferencing tools such as Google Meets, Zoom, Skype, or similar platforms enables effective communication and collaboration, particularly for team members and stakeholders located in different geographic locations. Video conferencing allows for real-time interaction, visual cues, and face-to-face discussions, enhancing communication quality.
5. Communication Protocols: Implementing clear communication protocols is crucial, especially when handling sensitive or confidential information. Establishing guidelines on who is authorized to share such information and how it should be shared ensures the protection and privacy of sensitive data.

By implementing these communication standards, the Tracking Activity Project Management system can foster efficient and effective communication, enhance collaboration, and ensure the consistency and security of project-related information.

### **6.7.12. Communication Escalation Process**

The recommended communication escalation process for the Tracking Activity Project Management system includes the following steps:

1. Identify the issue: The project team should identify any communication-related issues that require escalation. This could include miscommunication, unresolved conflicts, or significant roadblocks affecting communication flow.
2. Attempt to resolve within the team: The team should first make an effort to resolve the issue internally. They should engage in open and constructive discussions, involving relevant team members and stakeholders, in an attempt to find a resolution.
3. Involve a communication manager: If the issue persists and cannot be resolved internally, the project team should involve a designated communication manager or a person responsible for communication within the organization. This individual will act as a liaison and provide support in resolving the communication issue.
4. Escalate to higher management: If the communication issue remains unresolved, it should be escalated to higher management for further review and intervention. This step involves seeking the assistance and guidance of senior leaders or executives who have the authority to address the issue.
5. Document the issue and resolution: Throughout the escalation process, it is crucial to document the details of the communication issue, the steps taken to resolve it, and the final resolution. This documentation serves as a reference for future inquiries, provides transparency, and helps identify recurring patterns or areas for improvement.
6. Review and improve: After the escalation process, it is important to conduct a review and analysis of the process itself. This involves assessing the effectiveness of the escalation steps, identifying any shortcomings or bottlenecks, and implementing improvements to enhance future communication escalations.

It is essential to note that the communication escalation process should be adaptable and tailored to the specific needs of the project. The project team should regularly evaluate and refine the process to ensure its ongoing effectiveness in addressing communication-related challenges.

### **6.7.13. Glossary of Communication Terminology**

|  |  |
| --- | --- |
| **Term** | **Definition** |
| **Communication Plan** | A document outlining the communication strategy and protocols for the project team and stakeholders. |
| **Stakeholder** | An individual or organization that has an interest or concern in the project. |
| **Communication Method** | The means by which information is conveyed, such as meetings, email, telephone, or web portal. |
| **Communication Frequency** | The regularity with which project communications are distributed. |
| **Communication Objective** | The desired outcome or goal of a particular communication. |
| **Communication Flowchart** | A diagram showing the flow of information within a project. |
| **Escalation Process** | A procedure for resolving communication-based conflicts or issues. |
| **Communication Matrix** | A table outlining the communication requirements for a project. |
| **Communication Standards** | Standard templates, formats, or documents used for communicating within a project. |
| **Communication Constraints** | Factors that may limit or affect the effectiveness of project communications. |
| **Communication Guidelines** | Protocols for conducting meetings, teleconferences, and other forms of communication. |
| **Communication Technology** | Tools and platforms used for communication, such as SharePoint, message boards, and video teleconferencing. |
| **Communication Escalation Process** | A process for escalating communication-based issues or conflicts that cannot be resolved within the project team. |
| **Communication Approaches** | Different strategies and solutions implemented to address communication constraints, ensuring that all stakeholders are kept informed and that the project's communication objectives are met. |

Table 21 Glossary of Communication Management Terminologies

## **6.8. Quality Management Plan**

### **6.8.1. Introduction**

A research tracking activity and project management plan is essential to ensure the successful execution of a research project. This plan will define the strategies, procedures, and tools that will be used to track the progress, manage resources, and ensure the quality of the research activities. It will provide a framework for resolving issues, specifying roles and responsibilities, and ensuring effective communication among team members.

Goals of the research tracking activity and project management plan:

* Ensure the research project is executed within the defined timeline and budget.
* Maintain high-quality standards throughout the research process.
* Monitor and track the progress of research activities and milestones.
* Optimize resource allocation and manage risks effectively.
* Foster collaboration and communication among research team members.

The research tracking activity and project management plan will include comprehensive guidelines for managing the research project, tracking activities, and reporting progress. It will outline the roles and responsibilities of team members, specify the research methodologies and tools to be used, and establish procedures for data collection, analysis, and dissemination.

### **6.8.2. Quality Management Approach**

The research project will adopt a project management approach that combines traditional project management principles with agile methodologies to ensure flexibility and adaptability.

The following are the roles and duties for the Tracking Activity and Project Management:

|  |  |
| --- | --- |
| **Role** | **Description** |
| Jayvee M. Cabardo | Project development director oversees the projects progress and its completion, he also makes sure the project succeeds the stakeholders’ standards. |
| Faculty | The users that will be the using the system and oversee its usability by consultations and see if there are any needed improvements. |
| Noreen Keziah | Project team leader responsible for creating the project and managing the team, all in order to the enhancement of the system. |
| Project Development Team | Responsible to producing the system and better understanding of the product. |

Table 22 Quality Management Roles and Responsibilities

The approach will prioritize the following key aspects:

Project Initiation:

* Clearly define the research objectives, scope, and deliverables.
* Identify the stakeholders and establish effective communication channels.
* Develop a detailed project plan, including timelines, milestones, and resource allocation.

Project Execution:

* Assign roles and responsibilities to team members based on their expertise.
* Conduct regular project meetings to review progress, address issues, and track milestones.
* Employ project management tools and techniques to monitor activities, timelines, and budget.
* Foster collaboration and effective communication among team members.

Risk Management:

* Identify potential risks and develop contingency plans to mitigate them.
* Regularly assess and monitor risks throughout the research project.
* Implement strategies to minimize risks and address issues promptly.

Quality Assurance:

* Establish quality criteria and standards for research activities and outputs.
* Conduct regular quality checks and reviews to ensure adherence to standards.
* Implement procedures for data validation, analysis, and interpretation.
* Seek feedback from stakeholders to continuously improve research quality**.**

### **6.8.3. Quality Requirements / Standards**

The research project will utilize various tools and techniques for tracking and managing research activities effectively. These include:

Research Plan:

* Develop a detailed research plan that outlines the objectives, methodology, and timelines.
* Specify the research activities, milestones, and dependencies.
* Assign responsibilities and set deadlines for each activity.

Project Management Tools:

* Utilize project management software to track project progress, timelines, and resources.
* Create Gantt charts, task lists, and dashboards to visualize and monitor project activities.
* Implement a centralized document management system to store and share research materials.

Regular Monitoring and Reporting:

* Conduct regular progress reviews to track the status of research activities and milestones.
* Generate progress reports, including key findings, challenges, and next steps.
* Communicate research updates and outcomes to stakeholders through meetings and reports.

Collaboration and Communication:

* Foster effective communication and collaboration among team members.
* Utilize collaborative platforms and tools for sharing information, documents, and feedback.
* Conduct regular team meetings, ensuring open communication and knowledge exchange.

### **6.8.4. Quality Assurance**

The research project will implement quality control and assurance measures to ensure the validity and reliability of research findings. These include:

Data Collection and Analysis:

* Develop standardized procedures for data collection, ensuring accuracy and consistency.
* Implement rigorous data validation techniques and quality checks.
* Utilize appropriate statistical methods for data analysis and interpretation.

Peer Review and Validation:

* Encourage peer review and collaboration among researchers.
* Seek feedback and input from subject matter experts to validate research outcomes.
* Follow ethical guidelines and protocols for research integrity.

Continuous Improvement:

* Regularly assess the research processes and outcomes for potential improvements.
* Implement feedback mechanisms to collect input from stakeholders.
* Learn from previous research iterations and apply lessons to future projects.

By following this research tracking activity and project management plan, you will have a structured approach to effectively track and manage your research project, ensuring its successful completion and maintaining high-quality standards throughout the process.

### **6.8.5. Quality Control**

To ensure the quality of the research project and adherence to quality standards, the following quality control measurement will be implemented:

Data Accuracy:

Validate data sources and ensure the accuracy of data collected for research.

Perform data validation checks and cross-reference data from multiple sources.

Implement data cleaning and verification procedures to minimize errors.

Methodology Compliance:

Ensure that the research methodology is followed accurately and consistently.

Conduct periodic reviews to ensure adherence to the planned methodology.

Document any deviations from the original methodology and provide justifications.

Peer Review:

Implement a peer review process for critical research outputs, such as papers or reports.

Engage subject matter experts and peers to review and provide feedback on the research.

Incorporate suggestions and improvements from the peer review process.

Quality Assurance Checks:

Conduct regular quality assurance checks to assess the quality of research outputs.

Review research findings, analyses, and interpretations for accuracy and consistency.

Verify the consistency of research methodologies and data analysis techniques used.

Document Control:

Establish a document control system to manage research documentation and versions.

Ensure proper versioning, document access controls, and change management processes.

Maintain a central repository for research materials and ensure proper organization.

Stakeholder Feedback:

Seek feedback from stakeholders, such as advisors, sponsors, or collaborators.

Encourage open communication channels to gather feedback on research progress.

Incorporate stakeholder feedback to improve research quality and address concerns.

Continuous Improvement:

Regularly assess the research process to identify areas for improvement.

Analyze past research projects to learn from successes and challenges.

Implement lessons learned to enhance future research projects.

By implementing these quality control measures, the research project will ensure the accuracy, reliability, and validity of research outcomes. Regular checks and feedback loops will help identify and address any potential issues, leading to improved research quality and increased stakeholder satisfaction.

## **6.9. Risk Management Plan**

### **6.9.1. Introduction**

The Tracking Activity and Project Management (TAPM) project is aimed at implementing an efficient system for managing and tracking activities and projects within an organization. The project's goal is to streamline processes, improve collaboration, and enhance overall productivity. As an integral part of the TAPM project, the risk management plan aims to identify, assess, and mitigate potential risks that could impact the successful implementation and operation of the system. By proactively managing risks, the project team can ensure that potential obstacles are addressed, and the project objectives are achieved within the defined scope, budget, and timeline.

This risk management plan will provide an overview of the risk management process, define the roles and responsibilities of the project team in risk management activities, and outline the approach for identifying and assessing risks. The plan will also detail the strategies for mitigating risks and the activities for monitoring and controlling risks throughout the project's life cycle. The success of the plan will be measured by the team's ability to identify and mitigate risks effectively, ensuring the smooth implementation and operation of the TAPM system.

To develop a comprehensive risk management plan for the TAPM project, the following factors should be considered:

* **Identifying and Assessing Risks:** The project team will systematically identify potential risks associated with the development, implementation, and operation of the TAPM system. Risks may arise from various sources, such as technical complexities, resource constraints, stakeholder expectations, data security, and regulatory compliance. The team will assess the likelihood and impact of each risk to prioritize their management.
* **Risk Mitigation Strategies**: Once risks are identified and assessed, the project team will develop appropriate strategies to mitigate or avoid them. These strategies may include contingency planning, risk transfer through insurance, redundancy measures, and the development of fallback procedures. The team will prioritize mitigation strategies based on their effectiveness, feasibility, and alignment with project objectives.
* **Contingency Planning**: The project team will develop contingency plans for significant risks that could significantly impact the project's success. These plans will outline the steps required to minimize the impact of the risk and ensure project progress. Contingency plans will be regularly reviewed and updated as the project progresses and new risks emerge.
* **Communication and Reporting**: A clear communication and reporting framework will be established to facilitate effective risk management. This framework will ensure that risks are regularly reviewed, and the project team is updated on any changes in the risk landscape. Communication channels will be established among project managers, team members, and relevant stakeholders.
* **Risk Monitoring and Review**: Risk management is an ongoing process that requires continuous monitoring and review. The project team will establish a regular review process to evaluate the effectiveness of risk management strategies, update risk assessments, and identify new risks. The review process will be transparent, involving all stakeholders and ensuring timely actions are taken to address emerging risks.

By considering these factors in the risk management plan, the TAPM project team can effectively identify, assess, and mitigate risks, thereby ensuring the successful implementation and operation of the TAPM system while minimizing potential obstacles.

### **6.9.2. Top Three Risks**

The TAPM project's top three risks are:

Technical risk: This risk arises from the potential for development delays and technical issues, which could lead to budget overruns and project timeline delays. The TAPM project involves the integration of three separate systems, making it complex and prone to technical challenges during the development phase. It is crucial to proactively address technical risks to ensure the smooth implementation and operation of the TAPM system.

Resource risk: This risk stems from the possibility of insufficient resources being available to complete the project on time. Inadequate resources, such as skilled personnel, technology infrastructure, or funding, can result in project delays and budget overruns. Proper resource management and allocation are essential to mitigate this risk and ensure that the necessary resources are secured throughout the project's life cycle.

Data security risk: The TAPM project involves the migration of data from existing systems to the new system, which introduces a risk to data security. The system utilizes a PHP-based framework, and if not implemented correctly, it may be vulnerable to security breaches. Improper handling or inadequate security measures could lead to unauthorized access, data breaches, and loss of sensitive information. It is critical to implement robust data security measures, including encryption, access controls, regular security audits, and adherence to industry best practices, to mitigate this risk effectively.

By identifying and actively managing these top three risks, the TAPM project team can effectively address key challenges, allocate resources appropriately, and implement robust security measures. This proactive approach will enhance the project's chances of success, mitigate potential obstacles, and ensure the achievement of project objectives within the defined scope, budget, and timeline.

### **6.9.3. Risk Management Approach**

The TAPM project's risk management approach is based on the Agile methodology, which emphasizes a proactive and iterative approach to risk identification, assessment, mitigation, and monitoring. The risk management process will involve all stakeholders and foster a collaborative environment. The following steps will be undertaken to effectively manage risks in the TAPM project:

* Risk Identification: The project team will identify potential risks related to the project by conducting brainstorming sessions, reviewing past project experiences, and thoroughly analyzing the project's requirements and scope. Risks will be documented in a risk register, including information on their likelihood of occurrence, potential impact, and description.
* Risk Assessment: Identified risks will be assessed based on their likelihood of occurrence and potential impact on the project. A risk matrix will be utilized to prioritize risks according to their severity. Risks with high severity will receive priority attention for mitigation or contingency planning.
* Risk Mitigation: Mitigation plans will be developed for risks with a high likelihood of occurrence and significant impact. The project team will devise strategies and measures to reduce or prevent these risks. Additionally, backup plans will be formulated for risks that cannot be entirely eliminated, ensuring alternative approaches are in place.
* Risk Monitoring: Risks will be continuously monitored throughout the project lifecycle. The project team will regularly review the risk register to ensure risks are being effectively managed. As new risks are identified during the project, they will be added to the risk register, and the risk assessment process will be repeated to incorporate them into the overall risk management strategy.
* Risk Communication: Risk communication involves informing relevant stakeholders, including the project sponsor, project team, and other key stakeholders, about identified risks and the corresponding management strategies. The project team will maintain open and transparent communication channels to keep stakeholders informed about any detected risks, their evaluation, and the actions taken to address them.

By adopting this risk management approach, the TAPM project team aims to proactively identify, assess, mitigate, and monitor risks throughout the project's lifecycle. This approach will enhance decision-making, facilitate effective resource allocation, and ensure timely and successful project delivery while minimizing potential risks.

### **6.9.4. Risk Identification**

Through a comprehensive risk identification process, the potential risks associated with the TAPM project have been identified. The risk identification activities involved expert interviews, analysis of historical data from previous projects, and a risk assessment conference with the project team and key stakeholders. The risks were documented in a risk register, which includes a brief description, potential impact, and likelihood of occurrence for each identified risk.

The risk identification process for the TAPM project followed the Agile risk management plan and involved the following steps:

* Expert interviews: The project team conducted interviews with experts who have experience in developing similar systems. These interviews helped identify specific risks that may arise during the project's execution and allowed for the development of appropriate mitigation strategies.
* Analysis of historical data: The project team reviewed historical information from previous projects to identify recurring risks and lessons learned. This analysis provided valuable insights into potential risks and mitigation approaches that can be applied to the TAPM project.
* Risk assessment conference: A risk assessment meeting was organized, involving the project team and key stakeholders. During the conference, participants were encouraged to identify and assess risks that could impact the success of the TAPM project. The identified risks were then documented in the risk register.

The risk register is regularly updated to ensure that new risks are captured and existing risks are effectively managed throughout the project lifecycle. The project team will continue to monitor and evaluate risks to maintain a proactive risk management approach.

Some of the potential risks identified for the TAPM project include:

* Lack of resources: There is a risk that the project may face resource constraints, such as a shortage of personnel, budgetary limitations, or inadequate equipment, which could impact the project's progress.
* Scope creep: There is a risk that the project's scope may expand beyond its initial boundaries, resulting in delays and cost overruns if not properly managed.
* Dependencies on external parties: The project's success may be dependent on the cooperation and performance of external parties, such as vendors or third-party service providers. Delays or issues from these parties could have a significant impact on the project.
* Changes in technology: The project may be exposed to risks associated with changes in technology or industry standards. These changes may require additional work or resources to adapt the system accordingly.
* Security vulnerabilities: There is a risk that the project may be susceptible to security breaches or data loss, which can have severe consequences for the project's confidentiality, integrity, and availability.
* Human error: Risks associated with human error, such as mistakes or errors made by project team members, could potentially impact the project's deliverables and overall success.
* Unforeseen circumstances: The project may encounter unforeseen circumstances, such as natural disasters or shifts in the market, which could disrupt project activities and require agile responses to mitigate their impact.

To mitigate these risks, the project team has developed several strategies, including thorough testing and validation of the data migration process, the adoption of an Agile development methodology to identify and address technical issues promptly, providing training and support to team members to ensure successful adoption of the new system, and maintaining regular communication with key stakeholders to identify and address potential delays or issues in a timely manner. These risk mitigation measures aim to minimize the impact of identified risks and enhance the overall success of the TAPM project.

### **6.9.5. Risk Qualification and Prioritization**

To qualify and prioritize the risks identified in the risk register for the TAPM project, a probability-impact matrix was utilized. The project team assigned high priority to risks that have a high likelihood of occurrence and a significant impact on the project. The risk register will be regularly reviewed and updated to ensure that risks are appropriately prioritized throughout the project.

After identifying potential risks associated with the TAPM project, it is essential to determine the probability and impact of each risk to prioritize the implementation of risk mitigation strategies. A probability-impact matrix was employed to qualify and prioritize the risks into five categories: Extreme, High, Medium, Low, and Negligible.

The following descriptions outline the probability and impact of risks within each category:

* Extreme: Risks with a very high probability of occurring and a severe impact on the project.
* High: Risks with a high probability of occurring and a significant impact on the project. These risks require immediate attention, and mitigation strategies need to be developed to address them effectively.
* Medium: Risks with a medium probability of occurring and a moderate impact on the project. These risks should be closely monitored, and mitigation strategies should be developed in case they materialize.
* Low: Risks with a low probability of occurring and a minor impact on the project. These risks can be periodically monitored, and mitigation strategies can be developed if necessary.
* Negligible: Risks with a very low probability of occurring and a negligible impact on the project. These risks can be disregarded.

The identified risks and their prioritization based on probability and impact are as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Risk Assessment Matrix** | | | | | |
| Probability Impact | Rare (1) | Unlikely (2) | Possible (3) | Likely (4) | Almost Certain (5) |
| Insignificant (1) | N | N | N | N | L |
| Minor (2) | N | N | L | L | M |
| Significant (3) | N | L | L | M | H |
| Disastrous (4) | N | L | M | H | E |
| Catastrophic (5) | L | M | H | E | E |

Table 23 Risk Management Matrix

Based on the risk qualification and prioritization, the following risks have been identified for the TAPM project:

Technical Risks:

* High probability and high impact
* Lack of technical expertise to develop the system
* Failure of the new system to integrate with the current systems

Resource Risks:

* Medium probability and medium impact
* Inadequate resources for the project

Security Risks:

* Medium probability and medium impact
* Unauthorized access to the system

Given this prioritization, the project team will focus on developing mitigation strategies for the extreme and high priority risks first. The medium and low priority risks will be continuously monitored, and mitigation strategies will be developed if necessary. The negligible priority risks, with their low probability of occurrence and negligible impact on the project, will be ignored.

To align with the Agile risk management plan, this risk qualification and prioritization will be regularly reviewed and updated in the risk register throughout the project. Risks will also be incorporated into sprint planning, ensuring that the team is aware of the risks and can plan accordingly. Furthermore, the project team will encourage the identification and reporting of any new risks that may arise during the project's course.

### **6.9.6. Risk Monitoring**

To implement this plan, the project manager will incorporate high-scoring risks into the project schedule and assign a risk manager responsible for their monitoring. The risk manager will assess when risks require close attention and provide updates at bi-weekly project team meetings. Tracking risk trigger conditions will also be the responsibility of the risk manager.

Additionally, the project manager will ensure that the project team is aware of identified risks and their potential impact on the project. The project team will be encouraged to inform the risk manager of any new risks or changes to existing risks, which will be assessed and prioritized accordingly.

During weekly team meetings, the risk manager will report on the status of identified risks, any new risks, and the effectiveness of mitigation plans. Any necessary changes to the risk management plan will be made collaboratively with the project team.

In conclusion, the project team will implement an agile risk management methodology that emphasizes ongoing improvement and flexibility. The effectiveness of the risk management plan will be regularly assessed and adjusted as needed to ensure the project's objectives and quality standards are achieved.

### **6.9.7. Risk Mitigation and Avoidance**

To mitigate and avoid risks in the TAPM project, the following strategies and considerations will be implemented:

* Resource Allocation: The project manager will ensure that the team has the necessary resources, including skills, knowledge, tools, and equipment, to successfully complete the project within the allocated budget and timeline.
* Risk Assessment: A comprehensive analysis of potential risks will be conducted by the project team early in the project. The project manager will promptly identify and address potential risks to minimize their impact.
* Contingency Planning: The project team will develop contingency plans to be prepared for potential risks. The project manager will oversee the creation, testing, and validation of these plans for each identified risk.
* Communication: Clear and open communication will be promoted between the project team, clients, and stakeholders to minimize risks and prevent misunderstandings. The project manager will ensure effective communication channels are in place.
* Agile Approach: The project manager will encourage the use of the Agile methodology, which offers flexibility and responsiveness in risk management. This approach allows for ongoing risk assessment and adaptation to changes throughout the project.
* Change Management: A clear change management process will be established for the Dispatch Directory System project to handle unexpected changes. The project team will document, communicate, and seek approval from relevant stakeholders for any changes, ensuring effective risk management and successful project completion.

By implementing these strategies and considerations, the project team aims to identify and address potential risks proactively, minimize their impact, and ensure the successful delivery of the TAPM project.

### **6.9.8. Risk Register**

To effectively manage risks in the TAPM project, a comprehensive risk register will be maintained throughout the project. This register will include a detailed explanation of each risk, its likelihood, potential impacts, and any mitigation measures that have been implemented. Regular reviews and updates of the risk register will ensure its accuracy and relevance. Access to the risk register will be provided to all stakeholders and it will be stored in a centralized location.

The risk management approach for the TAPM project aligns with the principles of the Agile methodology, emphasizing early and frequent risk identification, collaborative risk management, and continuous risk monitoring. By proactively identifying and addressing potential risks, the project team aims to mitigate the effects of these risks and increase the chances of project success.

To facilitate the management of the risk register, a cloud-based project management tool and features in TAPM and GitHub will be utilized. This tool will serve as a shared document for the risk register, enabling the project team to track and prioritize risks, assign responsibilities, and monitor the progress of risk mitigation efforts.

The risk register will adhere to the following criteria:

* Risk ID: Each risk will be assigned a unique identifier.
* Risk Description: A clear and concise description of the risk event will be provided.
* Risk Category: Risks will be categorized as technical, organizational, or legal.
* Risk Owner: A designated individual will be responsible for monitoring and managing each risk.
* Probability: The likelihood of each risk occurring will be assessed on a scale of 1 to 5.
* Impact: The potential impact of each risk on the project will be rated on a scale of 1 to 5.
* Risk Score: The probability and impact scores will be multiplied to determine the overall risk score.
* Mitigation Strategy: Specific measures to mitigate each risk will be outlined.
* Status: The current status of each risk (open, in progress, or closed) will be documented.
* Target Resolution Date: Anticipated date for risk resolution will be recorded.

Risk Register:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Risk ID** | **Risk Rank** | **Risk Description** | **Category** | **Destination/Owner** | **Probability** | **Impact** | **Status** |
| RID001 | 1 | Integration issues with systems | Technical | Project Lead | High | High | In progress |
| RID002 | 2 | Insufficient resources Organizational | Organizational | Project Manager | Medium | Medium | In progress |
| RID003 | 2 | Data breaches and cyberattacks | Technical | System Developer | Medium | Medium | In progress |

Table 24 Risk Register

By maintaining an updated risk register and following these risk mitigation practices, the TAPM project will be better equipped to identify, assess, and address potential risks, thereby increasing the likelihood of achieving project objectives within the defined constraints.

## **6.10. Procurement Plan**

### **6.10.1. Introduction**

The Procurement Management Plan is an essential component for the successful completion of the TAPM project. This plan outlines the procurement requirements and establishes the framework for managing the procurement process, from the development of procurement documentation to contract closure. The primary objective of this plan is to ensure timely procurement of necessary items, within budget, and in accordance with the required quality standards.

The plan identifies the types of items to be procured and provides justification statements and timelines for their procurement. It also defines the contract types to be utilized and addresses the risks associated with procurement management, along with mitigation strategies. Standardized procurement templates and documents are integrated into the process for determining costs and evaluating suppliers.

The plan includes guidelines for managing multiple suppliers, if applicable, and outlines the contract approval process, decision criteria, as well as the establishment of contract deliverables and deadlines. It explains how procurement and contracts align with the project scope, budget, and schedule, while considering any constraints specific to procurement. The plan also provides direction to sellers regarding baseline requirements, such as contract schedules and work breakdown structures (WBSs).

Effective project management is a critical aspect of the procurement process, and this plan details how it will be executed. This includes the identification of prequalified sellers, where applicable. Additionally, the plan defines performance metrics to monitor and control the procurement activities throughout the project's life cycle.

Overall, the Procurement Management Plan for the TAPM project aims to meet procurement needs efficiently and effectively, with a focus on quality, cost, and schedule. It provides a clear roadmap that aligns all stakeholders and ensures their involvement and understanding throughout the procurement process.

### **6.10.2. Procurement Risks**

In the TAPM project, there are risks associated with procurement that can affect its success. To mitigate these risks, we will take the following measures:

* User performance: There is a risk that project team member may not deliver on time, causing project delays and increased costs.
* Project reliability: Some system may lack consistency or fail to meet contractual obligations, leading to project disruptions.
* Space capacity: Certain system may not have the necessary resources, which can result in delays or compromised quality.
* Changes in project scope: Changes in project requirements may impact procurement, requiring modifications to contracts or engaging additional improvements, causing delays or budget overruns.
* Legal and regulatory compliance: Non-compliance with laws and regulations in procurement can lead to disputes and reputational damage.
* Unclear specifications: Poorly defined documentation can lead to misunderstandings with vendors, resulting in inadequate deliverables.

To address these risks, our Procurement Management Plan will include strategies for risk identification, assessment, and mitigation. We will evaluate vendors carefully, establish clear contract terms, and maintain open communication. Regular monitoring of project performance will ensure compliance with contractual obligations.

By addressing these risks proactively, the Project Development Office can enhance the chances of successful procurement and implementation of the TAPM system.

### **6.10.3. Procurement Risk Management**

1. Identification of Procurement Risks for TAPM

To effectively manage procurement risks in the Tracking Activity and Project Management (TAPM) system, the following potential risks have been identified:

* Unforeseen increases in the cost of technology infrastructure and software
* Delays in the delivery or implementation of the TAPM system
* Provision of incomplete or inadequate technology solutions
* Inadequate contract terms and conditions for technology services
* Misalignment of the vendor's goals with the objectives of the TAPM system
* Inaccurate estimates of project costs and timelines for technology implementation
* Insufficient qualifications or expertise of technology

1. Assessment and Prioritization of Risks

The identified procurement risks for TAPM will be further assessed and prioritized based on their potential impact on the project. The assessment will involve evaluating the likelihood and severity of each risk, considering their potential consequences for project functionality, budget, and schedule.

1. Mitigation Strategies

Appropriate mitigation strategies will be developed for each identified risk. These strategies may include:

* Conducting thorough vendor evaluations and due diligence to assess their financial stability, expertise, and track record in implementing similar technology solutions.
* Developing detailed and comprehensive contracts that clearly outline project deliverables, performance standards, and dispute resolution mechanisms.
* Implementing a strong governance framework to monitor vendor performance and ensure compliance with contractual obligations.
* Regularly reviewing and updating project cost and timeline estimates to account for potential technology-related risks and changes.
* Establishing backup plans and alternative technology solutions to minimize disruptions in case of vendor failure or project delays.

1. Implementation and Monitoring

The procurement risk mitigation strategies will be implemented and monitored throughout the project's lifecycle. The project team will regularly assess the effectiveness of the strategies and make necessary adjustments as new risks arise or existing risks evolve.

By actively managing procurement risks, the Tracking Activity and Project Management (TAPM) project aims to minimize potential disruptions, ensure timely and cost-effective procurement, and enhance overall project success.

### **6.10.4. Cost Determination**

In the Track Activity Project Management (TAPM) project, the implementation of a cost determination process is crucial for effective project management. This process will be utilized to ensure the selection of competent and cost-effective solutions that align with the project's objectives. The cost determination process will involve gathering quotations, proposals, or bids from potential vendors in response to the project requirements.

The project team will thoroughly analyze all costs associated with the project, including procurement, implementation, maintenance, and any potential cost overruns. By prioritizing cost as a key decision criterion, the team aims to maintain transparency and fairness throughout the vendor selection process.

Multiple stakeholders, such as procurement managers, project managers, and financial analysts, will collaborate in the cost determination process. Their collective expertise will ensure accurate cost assessment and vigilant monitoring of the project budget.

To streamline the cost determination process in TAPM, standardized procurement templates and documents will be utilized. This approach guarantees consistent and accurate cost calculations across all procurement activities, enhancing efficiency and reliability. Additionally, the project team will establish performance metrics to evaluate the effectiveness of the cost determination process in procurement activities.

The cost determination section within the TAPM project's management plan plays a pivotal role in achieving successful project completion within budgetary constraints. By consistently measuring and monitoring project costs, the team can identify any potential cost overruns or deviations from the project plan, enabling proactive decision-making and effective cost management.

### **6.10.5. Procurement Constraints**

The following constraints must be considered as part of the Track Activity Project Management (TAPM) project's procurement management process:

1. Schedule Constraints:

The TAPM project has a strict deadline, and all procurement activities must be completed within the designated timeframe. Any delays in procurement activities could impact the overall project timeline and potentially delay its completion. The procurement process should be planned and executed in a manner that ensures timely delivery of goods and services.

1. Budget Constraints:

The TAPM project has a predetermined budget that must be adhered to during the procurement process. All procurement activities should be planned and managed in a cost-effective manner to ensure that the project stays within the allocated budget. It is essential to consider the costs associated with procurement, including procurement fees, implementation costs, maintenance costs, and potential cost overruns.

1. Technology Constraints:

The TAPM project has specific technological requirements that must be taken into account during the procurement process. Vendors or suppliers must possess the necessary technical capabilities and expertise to provide the required products or services. It is crucial to evaluate the compatibility of vendors' solutions with the project's technological infrastructure and ensure that they meet the project's technical specifications and standards.

1. User Selection Constraints:

The procurement process for the TAPM project must comply with the organization's selection policies and procedures. Project team must meet specific criteria, such as past performance, financial stability, and adherence to industry regulations, to be considered for the project. It is important to conduct a thorough evaluation of potential user to ensure their competence and ability to meet the project's objectives.

1. Resource Constraints:

The procurement process must consider the availability of internal resources, such as personnel and expertise, to ensure that procurement activities can be executed efficiently and effectively. The project team should assess the capacity and capabilities of internal resources to handle procurement tasks and allocate resources accordingly. It is important to balance resource utilization to avoid overburdening key team members while ensuring that procurement activities are adequately supported.

These constraints must be considered throughout the procurement process to ensure that the TAPM project's requirements are met within the project's timeline and budgetary constraints. Adhering to these constraints will help maintain project efficiency, cost-effectiveness, and successful completion.

### **6.10.6. Contract Approval Process**

The contract approval process for the Track Activity Project Management (TAPM) project will follow a formal and structured approach to ensure timely and efficient approval of all contracts. The process will be in line with the policies and procedures of the organization and will include the following steps:

1. Contract Initiation:

The Project Manager will initiate the contract process by submitting a procurement request through the designated system, such as Workday. The request will provide the necessary details, such as the scope of work, deliverables, and budgetary requirements.

1. Contract Planning:

Upon receiving the procurement request, the Procurement Officer will develop a procurement plan. The plan will outline the type of contract to be used, the evaluation criteria for vendor selection, and the timelines for various procurement activities. This plan will ensure that the contract approval process aligns with the project's objectives and requirements.

1. Contract Development:

Once the procurement plan is approved, the Procurement Officer will proceed with developing the contract documents. This includes drafting the Statement of Work (SOW), defining the terms and conditions, and establishing the pricing schedule. The contract documents will be prepared in accordance with the organization's standard templates and legal requirements.

1. Contract Review:

The contract documents will undergo a thorough review by the legal department to ensure compliance with applicable laws, regulations, and organizational policies. The legal review will assess the contractual terms, intellectual property rights, liability provisions, and any other legal considerations. Any necessary revisions or amendments will be made to ensure legal compliance.

1. Contract Approval:

The contract documents, along with the legal review findings, will be submitted to the Contract Review Committee for approval. The Committee will consist of representatives from the Project Management team, the Procurement Officer, and the Legal Department. The Committee will evaluate the contracts based on the predefined evaluation criteria, such as price, quality, delivery schedule, and vendor experience. They will assess the contract's alignment with the project's objectives and select the best value option.

1. Contract Execution:

Once the contract has received approval from the Contract Review Committee, the Procurement Officer will proceed with executing the contract. This includes sending the finalized contract to the selected vendor and issuing a purchase order through the designated system, such as Workday. The contract execution process will ensure that all necessary documentation is in place and that the vendor is officially engaged for the project.

1. Contract Monitoring:

Throughout the project's duration, the Project Manager will closely monitor the vendor's performance to ensure adherence to the contract terms. The Procurement Officer will also monitor the contract to verify that all deliverables are being met and payments are made in accordance with the agreed-upon terms and schedule. Any issues or disputes that arise during the contract period will be addressed and resolved in a timely manner.

The contract approval process will provide an objective evaluation of contracts, ensuring the selection of the best value option while complying with legal requirements. It will contribute to effective contract management and facilitate successful project execution within the defined constraints.

### **6.10.7. Decision Criteria**

For the Track Activity Project Management (TAPM) project, the contract review board will use the following decision criteria to evaluate:

* Technical Capability: Project team must demonstrate their technical skills and capabilities to successfully complete the project. This includes having relevant experience in similar projects and expertise in the required technologies. The board will assess the vendor's technical qualifications, certifications, and their ability to meet the project's technical requirements.
* Schedule: Project team must demonstrate their ability to meet the project's timeline and deliverables. The board will assess the Project team proposed project schedule, including key milestones and completion dates. Timely delivery and adherence to the project timeline are essential for the successful execution of the project.
* Quality: Project team must have a proven track record of delivering high-quality solutions and services. The board will consider references and testimonials from previous clients, as well as the vendor's reputation in the industry. The vendor's commitment to quality assurance, quality control processes, and adherence to industry standards will be evaluated.
* Risk Management: Project team must demonstrate a solid understanding of potential risks associated with the project and have plans in place to mitigate them. The board will evaluate the risk management approach, including their identification, assessment, and mitigation strategies for project and procurement risks. The Project team ability to proactively manage and address risks will be assessed.
* Sustainability: The Project team proposed solution should consider environmental, social, and economic sustainability factors. The board will assess the commitment to sustainable practices, such as the use of eco-friendly materials, energy efficiency, waste management, and supporting local communities. The Project team alignment with the APC sustainability goals and initiatives will be considered.
* Compliance: Project team must comply with all legal, regulatory, and contractual requirements. The board will evaluate the vendor's compliance with intellectual property rights, data privacy, security standards, and any specific legal or regulatory obligations. The Project team commitment to maintaining data confidentiality and security will be assessed.

The contract review board will carefully evaluate all proposals based on these decision criteria. They will consider the strengths and weaknesses of each vendor and select the one that best meets the project's needs, objectives, and overall value proposition.

### **6.10.8. Performance Metrics for Procurement Activities**

The performance metrics for procurement activities in the TAPM project:

System Performance Rating: Evaluate system based on effectiveness ease of use, quality, responsiveness, and communication, using a rating scale.

Procurement Cycle Time: Measure the time taken to complete the procurement process from request to delivery by calculating the average time spent on each stage.

Cost Variance: Compare actual procurement costs to planned costs and express the difference as a percentage.

These metrics help evaluate system performance, measure procurement efficiency, assess cost variations, and ensure completion of project. Monitoring these metrics enables continuous improvement and informed decision-making in the procurement process.

## **6.11. Implementation Plan**

### **6.11.1. Executive Summary**

The Project Management and Tracking Activity project is nearing completion, and as part of wrapping up the project, a plan has been created to smoothly transfer the system to its new owners. This plan gives a general outline of the transition process, including the current state of the system, and how it will be handed over to the new owner. The goal is to provide a clear and concise summary of the transition, making it easier for everyone involved to understand and follow.

The Project Management and Tracking Activity system was developed by Group Abyss in collaboration with the client to help him check multiple projects at the same time. The system has been in use by the developers for the past year to successfully achieve the project objectives.

The system is currently working well and fully functional. We have tested and verified that all the required features are working properly. As we transition out of the project, our goal is to provide the client with all the documents and support they need to effectively manage and maintain the system on their own. The developers want to make sure they have everything necessary to handle the system smoothly.

To ensure that the new owners have a thorough understanding of the system, all project deliverables - including technical documentation and source code – will be given to them.

 The project’s transition out plan contains a thorough timeline with an emphasis on a seamless and smooth transfer of ownership. The execution phase of the transition plan, we will focus on two main activities: suer training and go-live. During the closeout phase of the transition plan, we will write down what we have learned, update files, store important documents, and have a final meeting to wrap things up. Throughout the transition, the transition team will collaborate closely to ensure a smooth handover to the new owner without causing any project disruptions. The team comprises roles such as the Project Manager, Project Technical Lead, and Project Team Members. By doing so, the project team aims to guarantee a successful and seamless transfer of responsibilities while maintaining the project’s quality standards.

Overall, the goal of the transition plan is to guarantee that the client obtains a system that is fully operational and can be sustained successfully. Additionally, our group aims to conclude the project on a positive and satisfactory note.

### **6.11.2. Transition Approach**

The approach for the Transition Out plan for the Project Management and Tracking Activity project will be a phased transition approach, given the importance of maintaining continuity and minimizing disruptions to ongoing operations, it is crucial to ensure a smooth and seamless transition process. By adopting this approach, we enable a gradual and phased transfer of knowledge, resources, and responsibility to the new team. This helps reduce the potential for downtime and interruptions in service.

The following steps will be part of the transition strategy:

1. Transition Planning: The transition strategy will be created alongside the project team, and it will contain a thorough schedule of all tasks that must be completed throughout the transition period.
2. Communication Plan: The communication strategy will guarantee that all parties involved understand the transition plan, deadlines, and expectations.

**Timeline:**

The plan for transitioning out of this project consists of a comprehensive timetable of essential activities needed to effectively move away from the client. The transition plan is structured into two main stages: execution and closeout. The execution phase of the project includes user training and go-live events, after the final defense presentation. The closeout phase involves documenting lessons learned, updating files and having a final meeting to wrap things up.

**Assumptions:**

The following assumptions will be made for the transition approach:

1. The client will be present either on-site or through an online meeting to actively engage in the transition process and receive knowledge transfer.
2. The project team will provide the client all essential documentation, instruction, and source code to help in knowledge transfer.

### **6.11.3. Transition Team Organization**

**Roles and Responsibilities:**

1. **Project Manager:** Responsible for overseeing the transition team, ensuring that all transition activities are completed on time, maintaining effective communication and coordination with the client, and ensuring that the transition plan is followed.
2. **Developers/Technical Lead:** Responsible for offering their technical expertise for the project. They collaborate closely with the project team to comprehend the system. Accountable for coordinating with the new owner to facilitate a seamless transfer of technical knowledge and expertise during the transition process.
3. **Project Team Members:** Responsible for providing valuable support by sharing their knowledge and expertise regarding the system. They will closely collaborate with the project manager, developers, and client to facilitate a seamless transfer of knowledge and expertise during the transition.
4. **Project Sponsor**: Make decisions on whether to authorize or reject significant changes. Hold the authority to assess low-impact changes and can reverse decisions made by the Project Manager regarding change requests.

|  |  |
| --- | --- |
| **Role** | **Responsibilities** |
| Project Manager | Responsible for overseeing the transition team, ensuring that all transition activities are completed on time, maintaining effective communication and coordination with the client, and ensuring that the transition plan is followed. |
| Developers/Technical Lead | Responsible for offering their technical expertise for the project. They collaborate closely with the project team to comprehend the system. Accountable for coordinating with the new owner to facilitate a seamless transfer of technical knowledge and expertise during the transition process. |
| Project Team Members | Responsible for providing valuable support by sharing their knowledge and expertise regarding the system. They will closely collaborate with the project manager, developers, and client to facilitate a seamless transfer of knowledge and expertise during the transition. |
| Project Sponsor | Make decisions on whether to authorize or reject significant changes. Hold the authority to assess low-impact changes and can reverse decisions made by the Project Manager regarding change requests. |

Table 25 Transition Roles and Responsibilities

### **6.11.4. Workforce Transition**

The workforce plan is a crucial element of the transition strategy for the Tracking Activity and Project Management project. To ensure a seamless and effective transition, it is vital to identify and communicate the plan for the workforce in a timely manner. The Project Manager will work closely with the client, who is the new owner, to determine the best course of action for the workforce.

Effective communication will play a vital role in this process since it is crucial to keep the workforce well-informed about any changes in a prompt and respectful manner. The Project Manager will collaborate closely with the developers/technical lead, and project members to ensure they are fully aware of their choices and receive the required assistance throughout the transition process.

Furthermore, appropriate training or re-training will be offered to guarantee that the workforce possesses the necessary skills to consistently deliver exceptional services throughout and following the transition phase. The workforce transition plan will be periodically assessed and modified as needed to ensure the project’s timely and budget-compliant completion.

### **6.11.5. Workforce Execution during Transition**

Throughout the transition phase of the Tracking Activity and Project Management project, there are several tasks that will still need to be carried out. These tasks include:

**User Training:** During this period, it will be necessary to create and provide training materials to educate users about the system. The training sessions are anticipated to span three days and will incorporate a combination of classroom-based instruction and practical, hands-on training.

**Go Live:** This phase will mark the official implementation of the system. The team will be responsible for verifying the proper functioning of all systems before making the system accessible to users. This process will involve conducting final system tests and ensuring accurate migration of all data.

**Document Lessons Learned:** During this phase, the focus will be on documenting the valuable insights gained throughout the project. This includes identifying both successful aspects and areas that require improvement within the team’s performance.

**Update Files:** In this phase, the team will have the responsibility of ensuring that all relevant files are updated to reflect the project’s completion.

**Project Close out Meeting:** The concluding phase of the transition will entail a project closeout meeting with the client. This meeting will provide a chance to review the project, areas for enhancement, and the resolution of pending issues.

### **6.11.6. Subcontracts**

As there are no current contracts or subcontract agreements associated with this project, there is no need for a transition or transfer of any contractual obligations or related agreements.

### **6.11.7. Property Transition**

#### **6.11.7.1. Government Furnished Equipment (GFE)**

Given that there is no utilization of Government Furnished Equipment in the Tracking Activity and Project Management project, this specific section of the transition does not apply.

#### **6.11.7.2. Incumbent Owned Equipment**

It is crucial to clearly specify the equipment that belongs to the current owner and will remain in their possession. In case any equipment is required to support the client’s applications and services, the plan should indicate whether the new owner has the choice to acquire or utilize it. Also, the plan should outline a schedule for the transfer of ownership and include any necessary documentation such as agreements for it.

#### **6.11.7.3. Intellectual Property**

In the transition phase of the Tracking Activity and Project Management project, it is vital to address the management of intellectual property to facilitate the seamless transfer of all relevant documents, original designs, or plans. The handling of intellectual property involves various legal considerations and may involve the implementation of non-disclosure agreements between the current owner and the client.

To ensure the appropriate management of intellectual property during the transition, the following measures will be implemented:

1. Identification of all relevant intellectual property:

Ensuring the property handling of intellectual property during the transition is to identify all relevant intellectual property associated with the project. This includes, but not limited to documents, software code, and any proprietary information or trade secrets.

2. Negotiation of new agreements:

If there are any discrepancies or gaps in the existing agreements, the transition plan will involve negotiating new agreements between the current owner and client. The purpose of these negotiations will be to establish clear ownership and facilitate the proper transfer of all intellectual property assets.

3. Protection of intellectual property:

Throughout the transition period, the protection of intellectual property will be ensured by implementing non-disclosure agreements and employing other legal measures. These steps will safeguard the confidentiality and security of intellectual property assets.

4. Transfer of intellectual property:

Once the transition process is finalized, the transfer of all relevant intellectual property will take place, in accordance with the contractual agreements in effect. This transfer may involve transferring the intellectual property to the new owner or retaining it with the incumbent, based on the established contractual arrangements.

Adhering to these steps will enable the Tracking Activity and Project Management Project to achieve a seamless and secure transition of all intellectual property associated with the project.

#### **6.11.7.4. User Accounts and Passwords**

To effectively execute the transition plan for the Tracking Activity and Project Management Project, it is crucial to focus on the transfer of user accounts and passwords. The following outlines the steps and considerations involved in this aspect of the property transition:

* User Account Inventory

The initial step is to develop a thorough inventory encompassing all user accounts and their corresponding privileges. This inventory should encompass both internal and external users, including system administrators, faculties, project development directors, and end users.

* Password Security

Safeguarding security throughout the transition is paramount, and this involves resetting or disabling all user passwords during the process. This measure prevents unauthorized access to the system and its data. Before the transition takes place, users should be informed to change their passwords to a temporary one that will be provided to them.

### **6.11.8. Knowledge Transfer**

Documentation:

* The project team will provide the client with the necessary documentation.
* The documentation provided will encompass a project overview, technical specifications, and additional relevant information. These materials aim to enhance the client’s understanding of the system and how it works.

Training:

* The project team will personally conduct training sessions with the client to ensure a comprehensive understanding of the system and its operational process.
* The client will be provided with access to materials and resources to support their ongoing development of knowledge and skills pertaining to the system.

### **6.11.9. Schedule**



Figure 5 Transition Plan Schedule - Execution



Figure 6 Transition Plan Schedule - Closeout

### **6.11.10. Handover and Acceptance**

The handover and acceptance process will commence once the transition plan is finalized, incorporating all essential documentation and deliverables. Subsequently, the project team will arrange a formal meeting with the project sponsor to conduct a thorough review of the transition plan, verifying the fulfillment of all requirements.

At the handover meeting, the project team will present the project sponsor with the finalized transition plan, along with all necessary documentation and deliverables. The project sponsor will thoroughly examine the materials and engage in discussions regarding any unresolved matters or concerns.

Upon resolving all outstanding issues, the project sponsor will proceed to sign the formal acceptance document, signifying the successful completion of the handover process. This acceptance document will include a comprehensive checklist of all necessary deliverables and documentation, accompanied by the signatures of all who have reviewed and endorsed the materials.

The handover and acceptance section will also include a delineation of the procedure for addressing and resolving any remaining issues or concerns that may emerge following the handover's completion.

# **Sponsor Acceptance**

This project acceptance document establishes formal acceptance of all the deliverables for the

Tracking Activity Project Management system. The Tracking Activity Project Management System has met all the acceptance criteria as defined in the requirements document and project scope statement.

Sponsor Acceptance

Approved by the Project Sponsor:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Jayvee Cabardo  
Director, Project Development

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# **Appendices**

## **10.1. Project Methodology**

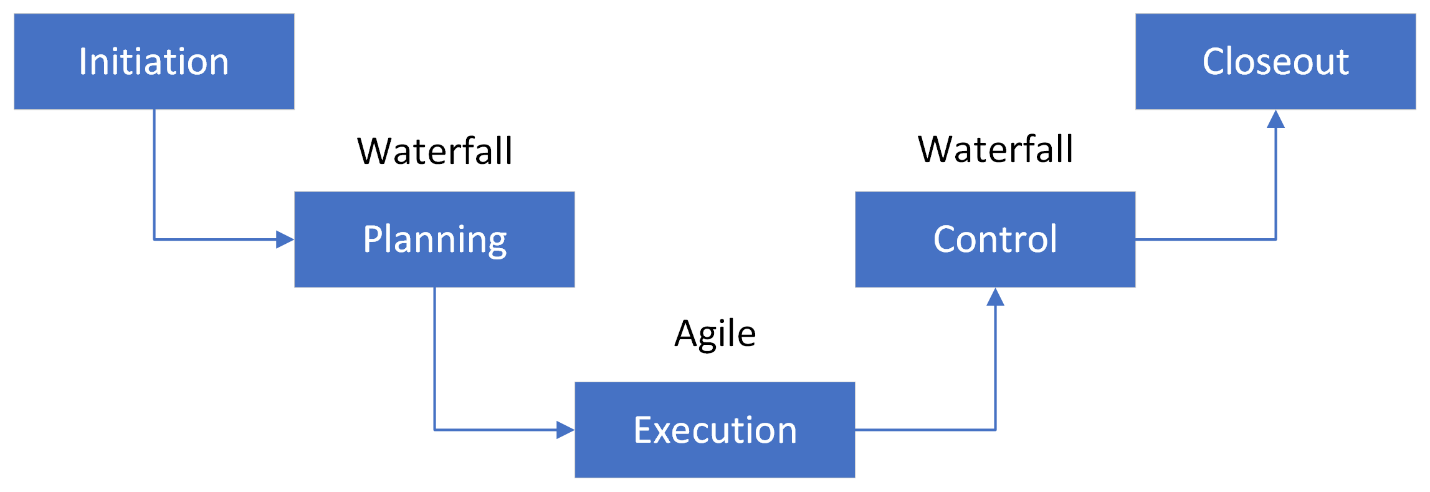


Figure 7 Project Methodology

## **10.2. System Requirements Specifications**

### **10.2.1. System Requirements for Development**

|  |  |
| --- | --- |
| **SOFTWARE** | **SPECIFICATIONS** |
| Operating System | Windows 8 or later (32/64 bit) |
| Visual Studio Code | Version: 1.37.1 |
| Browser | Chrome (Windows version: 80.0.3987.87, macOS  Version: 80.0.3987.87, Linux version: 80.0.3987.87, Android version: 80.0.3987.87, iOS version: 80.3987.88  Firefox (Standard Desktop version: 72.0.2, Extended Support version: 68.4.2, iOS Mobile version:22.0, Android Mobile Version: 68.4.2)  Safari (macOS Laptops and Desktops version: 13.0, iOS iPhone, iPad and iPod version 13.0)  Internet Explorer (Windows 10\* version: 11.0, Windows version: 8.1, Windows RT version: 8.1, Windows version: 8, Windows RT version:10.0, Windows 7 version: 11.0, Windows Vista version: 9.0, Windows XP version: 8.0) |
| XAMPP | Version: 7.4.1 |
| Laravel | Version: 5.8 |
| Github | Version: 2.3.1 |

Table 26 System Requirements for Development

### **10.2.2. System Requirements for Deployment**

|  |  |
| --- | --- |
| **SOFTWARE** | **SPECIFICATIONS** |
| Operating System | Windows 7 or later (32/64 bit) |
| Browser | Chrome (Windows version: 80.0.3987.87, macOS version: 80.0.3787.87, Linux version: 80.0.3987.87, Android version: 80.0.3987.87, iOS version: 80.0.3987.88)  Firefox (Standard Desktop version: 72.0.2, Extended Support version: 68.4.2, iOS Mobile version:22.0, Android Mobile Version: 68.4.2)  Safari (macOS Laptops and Desktops version: 13.0, iOS iPhone, iPad and iPod version 13.0)  Internet Explorer (Windows 10\* version: 11.0, Windows version: 8.1, Windows RT version: 8.1, Windows version: 8, Windows RT version:10.0, Windows 7 version: 11.0, Windows Vista version: 9.0, Windows XP version: 8.0) |

Table 27 System Requirements for Deployment

## **10.3. Development Tools Specification**

### **10.3.1. Development Tools Specification**

|  |  |
| --- | --- |
| **HARDWARE** | **SPECIFICATIONS** |
|  | Processor – dual core @ 2.4 GHz (i5 or i7 Intel processor or equivalent AMD), 64 bits |
| RAM 8gb |  |
| Free disk space – 1gb |  |
| With access to Wi-Fi or LAN |  |
| Internet Connection | At least 5mbps |
| At least 4gb/LTE connection |  |

Table 28 Development Tools Specification

### **10.3.2. Deployment Tools Specifications**

|  |  |
| --- | --- |
| **HARDWARE** | **SPECIFICATIONS** |
| PC or laptop | Processor – dual core @ 2.4 GHz (i5 or i7 Intel processor or equivalent AMD), 64 bits |
| RAM – 4gb recommended |  |
| Free disk space – 1gb |  |
| With access to Wi-Fi or LAN |  |
| Internet Connection | At least 5mbps |
| Preferably DSL |  |
| Unlimited plan |  |

Table 29 Deployment Tools Specifications

## **10.4. WBS Dictionary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Level** | **WBS Code** | **Element Name** | **Definition** |
| 1 | 1 | Tracking Activity Project Management | All work to implement a Tracking Activity Management System |
| **2** | **1.1** | **Initiation** | **The work to initiate the**  **project.** |
| 3 | 1.1.1 | Define project goals and objectives | Defining of project goals and objectives to start project |
| 3 | 1.1.2 | Identify project stakeholders and team members | Identifying the project stakeholders and team members that will be part of the project |
| 3 | 1.1.3 | Determine project scope and requirements | Project Scope and Requirements will be determined by the Team in order to set limits for the project. |
| 3 | 1.1.4 | Create project plan and timeline | Creation of Project Plan and Timeline for identifying Schedule |
| 3 | 1.1.5 | Set up Project Tracking Monitoring System | Setting Up the System, Tracking Activity Project Management. |
| **2** | **1.2** | **Planning** | **The work for the planning**  **process for the project** |
| 3 | 1.2.1 | Create detailed project plan | Outlining tasks, milestones, resources, and timelines for successful project execution. |
| 3 | 1.2.2 | Define project tasks and milestones | Establish a clear and specific breakdown of project activities and significant markers of effectivity track progress and ensure successful project compilation. |
| 3 | 1.2.3 | Create task board and assign tasks to team members | Setting a visual for task management and delegating specific assignments to team members to enhance collaboration and streamlined workflow. |
| 3 | 1.2.4 | Create project schedule and timeline | Constructing a well-organized and time-bound project schedule, outlining key activities and deadlines, to facilitate efficient project planning and execution. |
| 3 | 1.2.5 | Create budget and resource plan | Developing a comprehensive financial framework and allocation of resources to manage project costs and optimize resource utilization effectively. |
| 3 | 1.2.6 | Identify potential risks and create risk management plan | Thoroughly assess and analyze potential risks and devise a comprehensive plan to proactively mitigate and manage them throughout the project lifecycle. |
| 3 | 1.2.7 | Create communication plan | Planning a structured communication strategy to establish effective channels, guidelines, and frequency for seamless information exchange and collaboration among project stakeholders |
| 3 | 1.2.8 | Set up features in Project Tracking Monitoring System | Configure and enable essential functionalities within the Project Tracking Monitoring System to accurately monitor project progress, track milestones, and effectively manage tasks and resources. |
| **2** | **1.3** | **Execution** | **Work involved to execute the**  **project.** |
| 3 | 1.3.1 | Implement project plan and complete project tasks | Execute the project plan by actively carrying out assigned tasks and successfully completing project deliverables within the established timelines and quality standards. |
| 3 | 1.3.2 | Monitor project progress and adjust plan as needed | Evaluating key performance indicators and adapt the project plan as necessary to ensure optimal progress and alignment with project objectives. |
| 3 | 1.3.3 | Use task board and file sharing features to collaborate and share information with team members | Utilizing task board and file sharing features within the collaboration platform to foster seamless communication, promote teamwork, and facilitate efficient information sharing among team members. |
| **2** | **1.4** | **Control** | **The work involved for the**  **control process of the**  **project.**  **Throughout the**  **project** |
| 3 | 1.4.1 | Monitor project progress and performance | Continuously monitor and assess project progress and performance, leveraging key metrics and indicators, to ensure timely identification of issues, effective resource allocation, and overall project success. |
| 3 | 1.4.2 | Use reporting and analytics features to track project metrics and performance | Enabling data-driven insights and informed decision-making for project optimization. |
| 3 | 1.4.3 | Adjust project plan and resources as needed to ensure project stays on track | Continuously evaluate and refine the project plan and resource allocation to proactively maintain project progress and alignment with establishment goals, making necessary adjustments as requirement. |
| 3 | 1.4.4 | Manage potential risks and issues | Proactively handle project risks and issues by identifying, assessing, and implementing mitigation strategies to ensure smooth project progress. |
| 3 | 1.4.5 | Use communication to address conflicts or concerns among team members or stakeholders | Resolve conflicts and concerns among team members and stakeholders through effective communication. |
| **2** | **1.5** | **Closeout** | **The work to close-out the**  **project.** |
| 3 | 1.5.1 | Complete final project tasks and deliverables | Successfully accomplish the final project tasks and deliverables, ensuring all requirements are met and delivering a high-quality result. |
| 3 | 1.5.2 | Review project performance and outcome | Review project performance and outcomes for insights and improvement. |
| 3 | 1.5.3 | Use reporting and analytics features to generate project reports and lessons learned | Generate project reports and extract lessons learned using reporting and analytics features. |
| 3 | 1.5.4 | Archived project files and documents | Organize and store project files and documents in an archived format for future reference and easy retrieval when needed. |
| 3 | 1.5.5 | Conduct project review meeting with team members and stakeholders to discuss successes and areas for improvement | Conduct project review meeting to discuss successes and improvement. |
| 3 | 1.5.6 | Close out project in Project Tracking Monitoring System | Complete project closure within the Project Tracking Monitoring System to finalize and formally conclude all project-related activities. |

Table 30 Work Breakdown Structure Dictionary