

**Proposed Title:**

Project Management System With Team Performance Visualization

**Name of the Proponent(s).**

Mark Anthony N. Villiones

**Sector/Priority Areas/SDG.** *(Identify the sectors, priority areas, and associated Sustainable Development Goals (SDGs) that are the central focus of your study.)*

Sector: Information and Communication Technology (ICT), Business Management

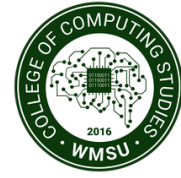
Priority Areas: Project Management, Team Collaboration

**Introduction.**

Project Management System With Team Performance Visualization. The system is envisioned as a comprehensive tool for project management and team collaboration. The research focus of this project is to integrate task tracking, communication, and performance visualization into a single platform. This integration aims to enhance the efficiency and effectiveness of project management in business organizations. The specific problem this project addresses is the lack of integrated, user-friendly project management tools that provide real-time insights into project progress and team performance. This issue is particularly significant in today's business environment where remote work and team collaboration are increasingly prevalent. The study involves the design and development of a project management system with features for task assignment, task status updates, group discussions, and performance visualization. The potential gains from this project include improved project outcomes, increased team efficiency, and enhanced productivity in business organizations.

**Objectives.**

- To create a user-friendly interface for project creation and task assignment.
- To develop a system for tracking task status and project progress.
- To implement a communication feature for group discussions.
- To design a performance visualization tool that provides insights into team efficiency and project completion rates.



**Features of the Proposed Study.** *(Since you are expected to develop a system, list down what your proposed system can do)*

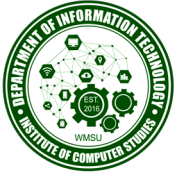
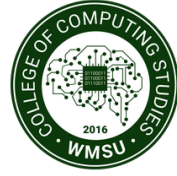
- **Project Creation:** Users can create a new project with a specific goal. This feature allows for the initiation of a project and sets the stage for task assignment.
- **Task Assignment:** The system allows for tasks to be assigned to each team member. This feature ensures that every member has a clear understanding of their responsibilities.
- **Task Status Updates:** Each team member can update the status of their assigned tasks. This feature allows for real-time tracking of task progress.
- **Performance Visualization:** The system provides a visual representation of team performance metrics. This feature offers insights into the efficiency of the team and the progress of the project.
- **Group Chat:** The system includes a group chat feature where team members can discuss the project and share ideas. This feature promotes collaboration and idea exchange.
- **Project Progress Tracking:** The system provides updates on project progress and task status. This feature ensures that all users, including team members, project managers, and other stakeholders, are kept informed about the project's progress. This allows for timely decision-making and keeps everyone involved in the loop.

**Literature Review.**

- A Literature Review on Project Management System - IJSR: This paper presents a study on project management systems, challenges confronting project management, the need for monitoring and control in project management systems, and the influence of information technology on project control.
- Systematic Literature Review - Project Management Institute: This paper provides a systematic literature review on the front end of projects. It discusses the importance of the front end, roles in the front-end phase of projects, and specific issues related to project management.

While these studies provide valuable insights into project management systems there is a gap in the literature regarding the integration of task tracking, communication, and performance visualization in a single, user-friendly platform. Additionally, there is a lack of research on how such a system could be used by various stakeholders in a project.

This project aims to address these gaps by developing a comprehensive project management system that enhances project management, improves team collaboration, and provides insights into project progress and team performance. This system could significantly contribute to the field of project management and align with several Sustainable Development Goals.



### Methodology.

- What data do you need and how will you collect them? Be as specific as possible.

**Answer:**

The data needed for this project includes project details, task assignments, task status updates, and communication logs. This data will be collected directly from the users of the system as they create projects, assign tasks, update task statuses, and communicate with each other.

- Who is your target population group and why them?

**Answer:**

The target population group for this system includes project managers, team members, executives, and other stakeholders in business organizations. These individuals are involved in various stages of project management and development. The system is designed to address their needs for efficient task management, effective communication, performance visualization, and real-time updates on project progress.

- If you need hardware components, what are those and for?

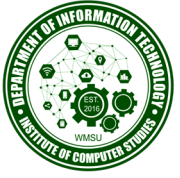
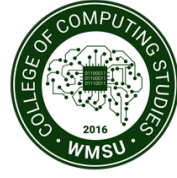
**Answer:**

As a web-based system, the primary hardware requirement is a server to host the application. Users will also need devices (computers, tablets, smartphones) with internet access to use the system.

- Are you going to use a specific algorithm in the development? Why? How will this algorithm be implemented?

**Answer:**

The development of this system does not require a specific algorithm. However, the system will use standard algorithms for data sorting and filtering to provide users with relevant and organized information.



- What are the tools you will need in the development?

**Answer:**

The development of this system will require a variety of tools, including a programming language such as JavaScript, markup language such as HTML a database management system such as MYSQL and a server such as PHP.

- How will you conduct your user testing? Who will be involved in the testing?

**Answer:**

User testing will be conducted through a series of usability tests, where a group of users from the target population will use the system and provide feedback. Both project managers and team members will be involved in the testing to ensure the system meets the needs of all users.

- How will you analyze the collected data and/or the result of your testing?

**Answer:**

The collected data and testing results will be analyzed using descriptive statistics and qualitative analysis. Feedback from users will be categorized and analyzed to identify common issues and areas for improvement.

- Do you need a third-party consultant to validate the result of your research? (For example, a medical doctor)

**Answer:**

Given the nature of this project, a third-party consultant is not necessary for validation. However, expert feedback from professionals in the field of project management could be valuable in refining the system.