

A Combined Platform for Meeting and Collaboration in the Learning Ecosystems

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Abstract:- The effectiveness of software projects hinges on smooth information exchange among different teams involved, including project managers, team members, developers, designers, and clients. Given that many software companies handle multiple projects simultaneously, there's a pressing need for streamlined project management and virtual collaboration. Manual oversight of students' final year projects is arduous. This project seeks to develop an automated system for overseeing student activities, offering functionalities for project management, supervision, monitoring, and virtual teamwork. This system caters to the needs of students, project coordinators, and guides by facilitating seamless sharing and interaction.

Keywords:- Project Management System, PMS, Meetings, Collaborative Learning System.

I. INTRODUCTION

Improving an organization's handling of projects, from planning to execution and monitoring, is possible through the integration of a project management system (PMS), a comprehensive software solution. Acting as a centralized platform, it fosters effective teamwork, resource management, and informed decision-making.

A PMS's main function is to assist enterprises in navigating the intricacies of project management with the use of strong tools. It gives teams the authority to specify project goals, allot resources, set deadlines, monitor development, and guarantee successful project completion.

An organization might need a mode to virtually uphold discussions and share their data. While many platforms provide such services of data sharing but don't have a feature to schedule meetings over the system. On the other hand, the system that provides meeting features cannot share data.

The approach is thus based on the idea of having a system that combines these features and provides a collaborative learning system.

➤ Research Gaps

Despite searching through numerous programs and conducting surveys, there was no specific project management system that could offer features for uploading and sharing data while keeping track of the members and enabling them to hold meetings among themselves.

➤ AIM

To design and develop a Project Management System (PMS) that showcases online meeting and management capabilities while providing users with a platform to collaboratively work together and share the data.

➤ What Constitutes A Project ?

In accordance with BS ISO 10006:1997, a project can be delineated as a unique endeavour encompassing a sequence of coordinated, monitored, organized, and supervised tasks with explicit initiation and conclusion points. The primary objective of any project is to fulfil predetermined criteria, while it should meet specific requirements, undertaking the steps to achieve those objectives also considering factors like time, budget, and available resources [1].

In simplified terms, a project comprises tasks necessary to accomplish a particular outcome or goal. It involves a set of inputs and outputs aimed at achieving a specific objective. Projects vary in complexity and can involve a single individual or a large team [2].

II. MANAGEMENT OF PROJECTS

Project management involves the utilization of expertise, skills, tools, and methodologies to fulfil the specific requirements of a project. Successfully conducting these tasks involves identifying the problem, devising a plan to address it, and executing that plan until the problem is resolved. While it may seem straightforward, each stage of the process demands careful focus. Through meticulous execution planning, Through efficient project management, the project can be concluded as planned and within the designated budget.[2].

The efficacy of project management greatly influences the success of projects. It's essential to distinguish between the success of the project and the success of its management process. While adept project management can boost project success, it's not a fail-safe against potential failures. Ultimately, the project's objectives serve as the primary yardstick for evaluating its overall success. [3].

While goals may seem clear and achievable, projects frequently experience delays, surpass budget constraints, or fail to meet their objectives. If correctly implemented the best practices, project management will increase the effectiveness, efficiency, and productivity of organizations [4].

Effective project management techniques significantly contribute to successful projects, as evidenced by their widespread use and positive influences on project success [5]. Project management practices aim to fulfil the project's original objectives efficiently, minimizing costs and achieving external goals that align with customer needs.[6]. Research shows that a majority of surveyed projects having project management achieve success. Hence, there is a significant connection between the achievement of project management and the overall success of projects. [5].

According to Shenhar's (2001) study, which delved into different project and management approaches, it was determined that projects cannot be evaluated using identical criteria. Shenhar highlights a prevalent misunderstanding that assumes all projects are uniform, contending that one of the key factors contributing to project failures is the indiscriminate application of tools and methods by project managers across different projects. Projects are distinct and require specific evaluations. Hence, it becomes challenging to employ a fixed management approach that reliably handles different types of projects consistently, given their distinctive nature, specific objectives, and dynamic targets [7].

Project management is a recently introduced concept, leading to a literature that is relatively new and developing, and lacks a conceptual and theoretical foundation. Hence, it is necessary to research and develop theories that address issues related to project type and management style based on it and develop better frameworks. This study suggests that the management and organization of large-scale projects It is recommended to intentionally adopt a management approach tailored specifically to the needs of projects. Clear identification of the project type before execution provides better adoption of control methods and a better selection of managerial tools. Such adaptability enhances the probability of project success and contributes to better organizational effectiveness [8].

Based on various research findings regarding project management success criteria, it has been observed that the conventional 'Iron Triangle'— centering exclusively on time, cost, and quality may not comprehensively define project success. It is suggested that certain projects can achieve immense success despite not meeting all three parameters. Additionally, even if a project satisfies all three constraints as intended, it might still fail to meet the sponsor's requirements. These insights emphasize the importance of considering additional success criteria. As a response, the concept of the "square route" has emerged, offering a broader framework that incorporates additional factors for assessing project success [9][10].

Incorporating sustainability in the management of projects can also increase the rate of project success [11]. The PMBOK ® guide gives an idea of how the process of project management and product-oriented processes interact with each other and how they overlap during the life cycle of a project [12].

➤ *Leader's Role in Project Management*

Managerial experience directly influences project success. Effective management and leadership from the project manager play a crucial role in developing a good product [13]. They hold the primary responsibility for formulating the project execution strategy to align with the overarching strategy of the parent organization, underscoring the significance of well-trained project managers. [14].

The project manager's influence extends to the quality of project planning processes. Given their overarching responsibility for the project's success, they must navigate challenges to ensure the entire process is executed successfully. To address the challenges, the project manager must identify factors adversely affecting the project's successful completion and devise clear mitigation strategies to address them. Within domains like "Communications" and "Quality," the project management community should enhance existing machines and methodologies to bolster the project manager's endeavours. In contrast, areas such as "Risk" and "Cost" more emphasis should be placed on the training of program managers in the use of the relevant tools

and techniques. In other words, the functional manager should also receive intensive but adapted project management training. It is important to support them at higher levels of the organization and also to treat them as projects in their own right [14].

The current interdisciplinary study examines the interplay between project types, project managers' personalities, and project success. According to the Project-Organization (P-O) fit theory, it posits that projects overseen by managers whose personalities align with the profiles of their projects are likely to achieve greater success, whereas the opposite is also true. The results tentatively support these hypotheses, revealing different patterns of correlations between managers' personalities and project success dimensions across various types of projects. Despite its exploratory nature, the study's findings grasp theoretical significance by showcasing the importance of cross-disciplinary cooperation between project management and personality psychology, while also providing practical insights for managers to enhance project success through better alignment between project managers and their assigned projects [15].

Projects are typically structured to effectively address anticipated uncertainties, while the execution of project tasks necessitates thorough planning and can pose greater challenges to project teams in comparison to routine assignments. Thus, project managers can enhance project success by aligning PMTT with phase characteristics and success measures [16].

➤ *Stakeholders Importance*

Criteria for evaluating project management achievement typically focus on expense, duration, and standard/performance. However, assessing project success requires considering the objectives of all stakeholders across various management levels throughout the project lifecycle. With numerous objectives involved, objectively measuring project success can be challenging. Nevertheless, project management success is evaluated throughout the project lifecycle using traditional performance metrics [3]. While traditional measures like expense, duration, and standard are commonly utilized for evaluation project fulfillment, they may not always ensure stakeholder satisfaction [5].

Expanding on this, additional research emphasizes the importance of evaluating success from various viewpoints of stakeholders, including those of the project proprietor, creator, builder, consumer, and the broader community. In line with this, studies suggest that measuring success should incorporate financial aspects. Studies demonstrate how a discounted cash flow framework can be useful in assessing project success economically. The research delved into analyzing project scope, quality, duration, and cost as variables within this interface [17].

C.S Lim and Mohamed Zain (1999) propose that project success relies on varying viewpoints also achieved when objectives are fulfilled. They introduce two perspectives: the micro and macro views. The micro perspective evaluates project management success at project completion, focusing on construction aspects and assessed by developers and contractors. On the contrary, the broader viewpoint considers the functional aspect, concentrating on long-term customer satisfaction and evaluated by users and stakeholders. The article suggests that both completion and satisfaction criteria are essential for the macro viewpoint, while only completion criteria are needed for the micro viewpoint of project success [18].

➤ *Management Practices and Tools*

The scholars define project management practices as the integration of ideas, procedures, instruments, and methodologies. Besner and Hobbs (2004) emphasize the contrast between employing tools and methodologies and utilizing fundamental concepts and protocols through the analogy "A skilled chef can elaborate on his recipe, but observing him in action in the kitchen, utilizing his equipment..." [19]. This analogy underscores the significance of accurately applying readily accessible tools and methodologies, rather than basic concepts and protocols, which are also somewhat relevant in operational management..

This study makes two significant contributions to the existing literature concerning the adaptable utilization of Project Management Tools and Techniques (PMTT) throughout different phases of project life cycles. Firstly, it validates that the utilization of PMTT fluctuates based on project phases, which is influenced by distinct characteristics and outcomes of each phase. Secondly, it identifies specific PMTT that notably contribute to the success metrics of projects in each respective phase. [16].

Project management methodologies, among other factors, exert considerable influence on determining project outcomes, and not all project management tools or methods are directly correlated with success. Nevertheless, despite an extensive examination of literature, no instances of successfully completed projects devoid of fundamental project management practices have been identified. Consequently, several researchers [20]-[23] underscore that the effective application of tools and techniques could potentially enhance project success.

➤ *Factors Influencing Project Success*

Project success factors are not universal and can vary significantly from one project to another. Different projects have unique sets of factors that influence their success, which are dependent on the specific type of project. Hence, it is widely acknowledged as a result individual projects might contain their distinct factors contributing to success. These unique factors along with managerial variables have a crucial role in deciding project success. Considering the diverse

nature of projects and their varying characteristics, employing multivariate methods alongside a clearly defined classification framework and multidimensional success measures is considered simple, straightforward, and effective for large-scale projects [24].

Modern literature describes many research results provide various insights and present extensive definitions, emphasizing the distinctiveness of each project. Project success is vital for achieving project goals, typically involving a set of criteria tailored to each project. Common factors include meeting objectives on time and within budget, maintaining high standards, satisfying customers, and ensuring stakeholder involvement [25].

Based on the feedback gathered from the survey, it is feasible to pinpoint essential elements for success in project management, which demonstrate notable correlations with factors such as company size, project scale, type of organization, and project managers' level of experience [26].

A list and explanation of project success factors including time, expenses, quality, project monitoring, project boundaries, and project alterations., stakeholder contentment, project personnel, backing from senior management, resource accessibility and handling of potential hazards are evaluated in this academic works [27].

Projects differ from day-to-day operations, requiring specialized governance for success. Turner and Keegan (1999, 2000) identified key in project-based organizations, procedures are put in place to manage tasks efficiently., emphasizing the functions of the mediator and guardian in overseeing client relationships [28].

This governance structure aligns with Williamson's (1996) transaction cost perspective and is crucial for organizational success. The broker serves as a liaison, fostering strong client connections, while the steward coordinates resources strategically for project completion. Ultimately, the project manager ensures smooth and efficient management of the entire process [28].

The aim of adopting project management practices is to attain uniformity in project success. However, the absence of a universally accepted definition of project success adds to the challenge of achieving this goal. [13]. Certainly, it's not feasible to plan every activity with precision. as that will be accomplished. Project management methodologies must adapt due to constantly shifting internal and external circumstances that influence project success. Therefore, it is crucial to acknowledge the proficiency of the project manager.

III. LITERATURE REVIEW

[28] In This Project The Authors Goal Is To Develop A System That Will Be Automated Through The Automated Project Tracking System, A Comprehensive System Designed

For Managing And Controlling Projects., And Supervising Students' Final-Year Projects Through A Cloud-Based Platform.That Is Beneficial For Students, Project Coordinators, And Undertaking Guides.

Initially, all students must complete the registration process via the registration form. Subsequently, registered students can log in to the system by entering their ID and password for authentication. Initially, the student log in The next step involves integrating them into the project tracking system, after which they will be organized into groups individually.

In like manner, the project guide will be required to access the system by logging in with their designated ID and password. The system also enables the group of students to offer their project subject then the system will automatically allocate guides to groups of students, with an administrator overseeing the process. whose complete task is Under his authority. The administrator could be either the university or the college..

For creating project reports they used an online form provided in the cloud. They also gave a deadline towards the students for furnishing Following their selection of a project topic, the project topics will be generated automatically will be assigned towards the students. In accordance with The project report, the coordinator, and the mentor can observe the tasks completed by a specific group of students and The decision to approve or reject the project report lies with the administrator, who can communicate this outcome to both the guide and the student.

In this particular endeavour, they used PHP and MYSQL language for programming. The server used in the project is Linux Server. For this project the system can be controlled by three panels, outlined as follows:-

➤ Administration

The administrator possesses the right After incorporating departments into their college or institute, the individual will proceed to appoint staff based on departmental requirements. If tasks are added successfully, the responsibility of assigning them to the Project Group falls largely on the Administrator. Additionally, the Administrator has the authority to modify the status of individual staff members, students in a way that prevents the student from log in to their account.

➤ Staff

Upon logging in, staff members have access to viewing several team that are assigned to them Following administrative actions, the staff will assume the role of project guides. They will review project details and adjust project statuses as needed. For instance, if the staff or guide is dissatisfied with any aspect of the topic or documentation, the project manager has the authority to decline specific aspects of the project, providing justification for the rejection.. Then,

the Staff or guide can view the Weekly Report of Projects as he can progress of Project. After which Staff or guides can send Notifications to a particular group. Staff or guides can give a rating to every project from their college by which we can calculate which is the most highly rated Project.

➤ *Students*

In the Student Panel, They have to register themselves on the website while Registering Students should select whether they are the Leader Of the group or a member of the group. After Logging in, there are multiple/different menus for students who are Leaders and members. The Project Leader has the right to add participants to his assigned group (by finding the corresponding student's database by student Name, Email, and Mobile). After that Leader Can Upload Project Details by himself, uploading Documentation for the Abstract, Overview, and Black book. Other Participants from the team will be able to view the properties by their login. Student can view the Notifications that are sent by Their Project Guide. Student can give ratings to every project from their college by which we can calculate which is the most highly rated Project.

Conclusion: The Automatic Project Tracking System (APTS) stands out as a highly efficient application with versatile utility. Compared to conventional methods, APTS offers numerous advantages such as centralized data management, real-time status updates, notification capabilities, user-friendly interface, and data backups. Implementing this interface significantly lessens the time and effort typically needed for managing as well as monitoring final year projects within colleges. Our utilization of the Apriori algorithm for student search and data analysis of uploaded files further enhances system functionality. Additionally, we incorporate a project rating feature, facilitating comprehensive project evaluations. Moreover, the system boasts an intuitive interface, ensuring ease of use and seamless adaptation for users utilizing this web application system on the cloud.

[29] This paper presents the design of a university research project management system that operates on a cloud platform. The framework comprises several modules, including application and evaluation of projects, project initiation management, monitoring project progress, managing project completion, and presenting project research outcomes. These modules enable The decentralized submission of the project declarations, commencing reports, advancement reports, conclusion reports, and web reviews, ensuring efficient and comprehensive project management processes. The system is characterized by digital content, continuous assistance, workplace web, integration, automated outcomes, as well as immediate feedback.

It effectively addresses the challenges associated with management of processes for university research project declarations., improves management of project effectiveness, conserving the time of project management staff, engaging

experts and faculty reviews, advancing the university investigation outcomes as well as achieving the digitization of university investigation project management.

The system operates on a cloud computing platform, utilizing MyEclipse, Java Web, MySQL, and Tomcat technologies. MyEclipse serves as the development tool, Java Web is employed for programming, MySQL functions as the background database, and Tomcat is utilized as the web server. The process entails constructing a MySQL database according to the database architecture outcomes, developing a Java Web system within the MyEclipse implementing environment, and ultimately delivering functionalities via the Tomcat server.

Tailored towards user roles, this system comprises a background management module (for administrators), a teacher module (for educators), and an expert module (for specialists). Functioning on a cloud computing workspace, the university research project management system facilitates the decentralized provision also online assessment of diverse content pertaining to university research projects. Automated sorting of analysis outcomes by level, along with direct feedback (recommendations), streamlines the process. Consequently, the system significantly enhances the effectiveness of university research project management, reduces the workload of project management personnel, enables expert and educator reviews, showcases and advances university research findings, achieves information-driven university research project management, and fosters the digitization of university administration.

[30] This paper presents a comparative analysis of multiple case studies. The abstract highlights the challenges encountered by an IT company, including projects that exceed agreed-upon scope, delays in project completion, and budget overruns. In the traditional project management approach, many projects rely heavily on manual documentation, which consumes considerable time, leaving field teams grappling with technical tasks unsuitable for manual documentation.

Project management plays a crucial role in overseeing the commencement, preparation, carrying out, supervision, and completion phases of a project's lifecycle. However, the project team often faces the dilemma of prioritizing between documentation tasks and project execution. Project Management Information Systems (PMIS) serve as valuable tools aiding project teams in automating planning, scheduling, monitoring, and reporting tasks throughout the project lifecycle. Many IS/IT projects utilize PMIS to enhance their project management efficiency, leading to successful project outcomes. This study conducts a comprehensive review of previous case studies and research employing PMIS, aiming to identify the benefits derived from their utilization. The findings reveal a notable enhancement in project management effectiveness attributed to the adoption of PMIS.

Table 1 Project Management the Beginning of a Project's Lifecycle

Case Study	Description
Iran	PMIS which provides task reporting, and resources in Graphical form facilitated by PMIS can aid projects managers to take informed decisions about project circumstances.
Canada	Project Management Information Systems (PMIS) support project managers in improving their planning processes, scheduling, monitoring, and project control, thus enhancing the promptness of decision-making.
Kenya	PMIS can guarantee the project's success by delivering high-quality information and being supported by users' ability to effectively utilize this information for making precise project decisions.
Latvia	Utilizing Redmine (PMIS) has the potential to enhance project performance through increased user engagement in terms of frequency and duration of usage. The most significant impact on project performance is observed within the communication module and overall project performance.
Slovenia	Utilizing Project Management Information Systems (PMIS) has the potential to enhance collaboration and transparent management of human resources and finances within an organization. However, to ensure successful implementation, it is imperative that the process aligns with the organization's strategy to cultivate a culture that embraces the adoption of such systems.

IV. METHODOLOGY

The project was built using PHP, JS, MySQL, and Zoom API methodology. It combines the features of Zoom meetings and Google Classroom into a comprehensive project management system that is integrated with PHP, JavaScript, and MySQL. The system has three login roles: Admin, Teacher, and Student. Administrators can use the Zoom API to schedule meetings and oversee the progress of the project. Teachers can set up topic-specific classrooms, assign tasks, publish notifications, and view or download the student's uploaded data. Students can participate in task discussions, submit project-related files like presentations or PDFs, join classes, and get email notifications for meetings.

To create a smooth learning management system, we used Google Classroom design features to access classroom data. The scheduling of Zoom meetings and applications is synchronized using the Zoom API, making the scheduling process easy. Users can safely upload and share project materials inside their classrooms using document management tools. Email notifications remind users of impending events, and a notification system informs them of meetings, new alerts, and task assignments.

To ensure functionality across a range of browsers and devices, and to fix any security vulnerabilities, we carried out thorough testing and quality assurance procedures. The deployment of the project on a web server that supports PHP and MySQL ensures accessibility. Continuous maintenance maintains system dependability and compatibility with external APIs, offering administrators and users alike ongoing support and enhancement.

➤ Project Modules

There are three major modules in the project: the Admin module, the Teacher module, and the Student module. Each module has distinctive features based on its tasks.

- *Admin Login:*

The Admin Login module allows administrators to create meetings according to their preferences. Admins can organize these meetings and share them with participants via email. Participants receive meeting invitations in their respective email accounts. Admins can set the duration, date-time, and other details of the meetings while creating them. They can also update meeting-related data after creation. Additionally, admins can create departments and assign teachers to them. Meetings can be scheduled for different departments.

- *Teacher Login:*

The Teacher Login module provides functionalities for making announcements and creating attachments where students can submit their assessments. Teachers can upload or post announcements and messages regarding the curriculum. They can view and download student assessments. Similar to Google Classrooms, teachers can create classrooms for their specific subjects and post materials. They can create classes by providing class names, code, etc. The classrooms have unique class code which helps to access the correct classroom. Teachers access meetings through notifications and their email accounts.

- *Student login:*

The Student Login module enables students to respond to announcements made by teachers and submit assignments. Students can also upload or post their work to teachers for assessment. They can join classrooms for their teachers' subjects and download materials posted there. They can also create groups for their projects and add other students by using the group code. Students receive meeting notifications in their email accounts.

• *Zoom Meeting API:*

The Zoom API is used to feature online meeting capabilities in our system. It provides various features of the Zoom application, allowing participants to share data during meetings. Conversations and file-sharing features help create a more engaging online environment.

➤ *Analysis*

We studied and compared various PMISs according to different metrics and produced a graphical analysis of performance in comparison to our system. Here the blue bar is for the university research project management system, the orange bar is for the traditional IT project management systems, and the grey bar is for our system. The rating is on a scale of 0-10.

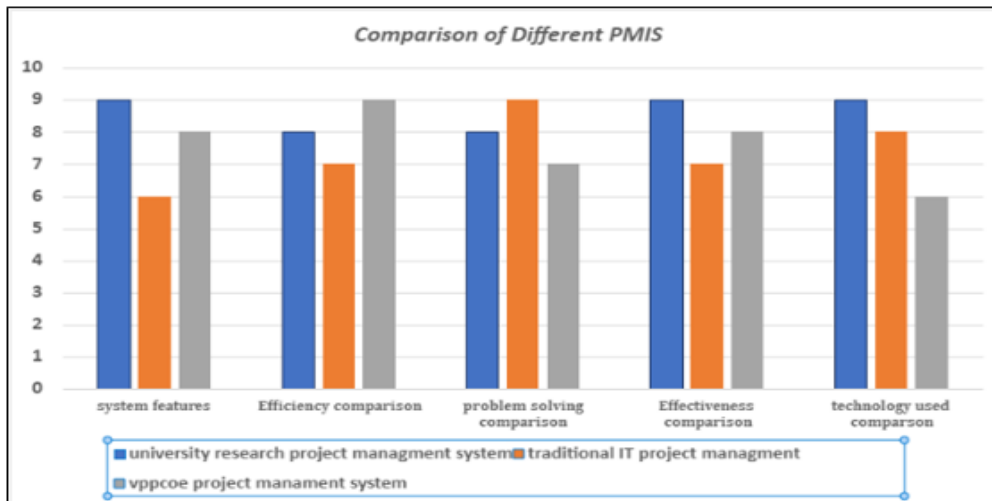


Fig 1 Comparisons Were Made On The Following Criteria

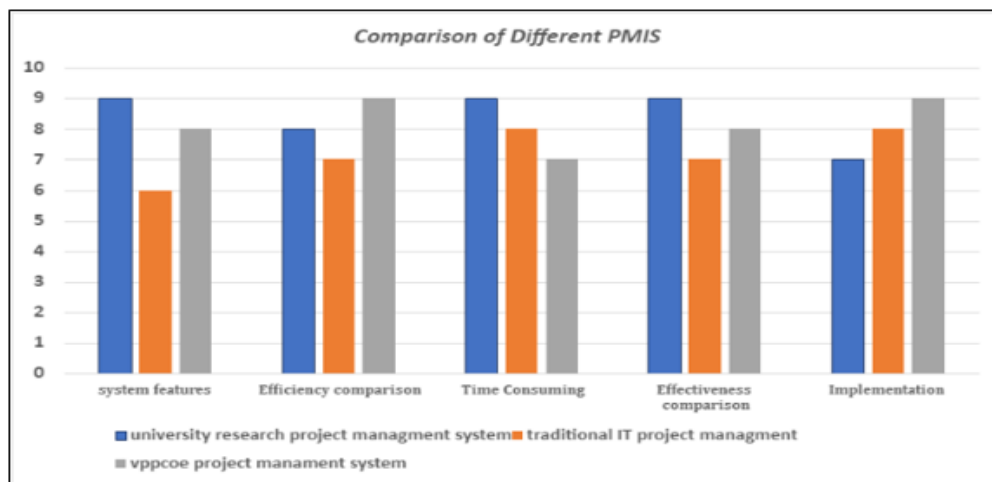


Fig 2 Comparisons Were Made on the Following Criteria

➤ *In Fig. 1, Comparisons Were Made on the Following Criteria:-*

- System feature: it is regarding the features that the systems provide.
- Efficiency comparison: it relates to how efficient is the program.
- Problem-solving: capability of solving the mentioned problem.
- Effectiveness comparison: how effectively the system performs.
- Technology used: the kind of technology used in the system.

Based on the comparison it can be stated that compared to other systems our system works well enough to solve problems and work effectively.

➤ *In Fig. 2, Comparisons Were Made on the Following Criteria:-*

- Time-consuming: it is regarding the features that the systems provide.
- Implementation: it relates to how efficient is the program.

Based on the comparison it can be stated that compared to other systems our system is not so much time consuming and can be implemented easily.

The other aspects of comparison also concluded that majorly the systems lacked many functionalities and features. The meeting features were not present in almost all the cases. Besides, the app that did provide meetings could not create a collaborative learning environment.

V. CONCLUSION & FUTURE SCOPE

Successfully built a project based on a Project Management System (PMS) using the software language PHP, JavaScript, database in MySQL, and integrated Zoom API with JavaScript. Created a Login page where the user was successfully able to enter his/her credentials to proceed to the next page which was the dashboard. Similarly, we created an Admin module that can create departments and manage them. The Admin can create, organize, and post meetings with the participants via their respective email. Then we created a Teacher module where they can post announcements and learning materials. They can create classrooms where students can join using a unique class code and access the materials. Teachers can also create attachments for students to upload their work. Then there is a Student module where a student can access the teacher's class materials by enrolling in the class with the help of a unique code. They can also form groups among them and add members with the help of a unique group code. The meetings are received over email and the participants can join as per the schedule of the meeting.

These conclusions are drawn from the project's outcomes, performance, and feedback. The conclusions drawn after building a project based on a PMS reflect the positive impact of the system on project management processes, efficiency, and outcomes. These conclusions often support the organization's decision to invest in and continue using the PMS for future projects. Additionally, ongoing monitoring and feedback loops ensure that the system evolves and continues to meet the organization's needs.

This project can be customized and transformed into a management system according to the specific needs of any organization. In the field of education, gamification elements such as badges, leaderboards, and rewards can be introduced to encourage learning and improve student motivation and engagement. Similarly, in programming domains, modules can be included to allow participants to write and execute real-time codes, among other features. In business-related domains, we can introduce graphical standards and other features to help businesses calculate their overall growth. Our platform can be utilized by companies to conduct training sessions, workshops, and webinars.

REFERENCES

- [1]. Bennett, J. M., & Ho, D. S. K. (2014). *Project Management for Engineers*. World Scientific Publishing Company.
- [2]. <https://www.wrike.com/project-management-guide/project-management-basics/>
- [3]. De Wit, A. (1988). Measurement of project success. *International journal of project management*, 6(3), 164-170.
- [4]. Kerzner, H. (2018). *Project management best practices: Achieving global excellence*. John Wiley & Sons.
- [5]. Hussain, M. R. (2022). Why Public Sector projects fail or succeed in Pakistan-A model for evaluating impact of HR management practices on Project Success. *International Journal of Engineering and Management Sciences*, 7(2), 77-90.
- [6]. Koskela, L. J., & Howell, G. (2002). The underlying theory of project management is obsolete. DOI: 10.1109/EMR.2008.4534317
- [7]. Shenhar, A. J. (2001). One size does not fit all projects: Exploring classical contingency domains. *Management science*, 47(3), 394-414.
- [8]. Shenhar, A. J., & Dvir, D. (1996). Toward a typological theory of project management. *Research policy*, 25(4), 607-632.
- [9]. Pollack, J., Helm, J., & Adler, D. (2018). What is the Iron Triangle, and how has it changed?. *International journal of managing projects in business*, 11(2), 527-547.
- [10]. Atkinson, R. (1999). Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International journal of project management*, 17(6), 337-342.
- [11]. Khalifeh, A., Farrell, P., & Al-edenat, M. (2020). The impact of project sustainability management (PSM) on project success: A systematic literature review. *Journal of Management Development*, 39(4), 453-474.
- [12]. Jamali, G., & Oveisi, M. (2016). A study on project management based on PMBOK and PRINCE2. *Modern Applied Science*, 10(6), 142-146.
- [13]. Montalbán-Domingo, L., Casas-Rico, J., Alarcón, L. F., & Pellicer, E. (2024). Influence of the experience of the project manager and the foreman on project management's success in the context of LPS implementation. *Ain Shams Engineering Journal*, 15(1), 102324.
- [14]. Globerson, S., & Zwikael, O. (2002). The impact of the project manager on project management planning processes. *Project management journal*, 33(3), 58-64.
- [15]. Dvir, D. O. V., Sadeh, A., & Malach-Pines, A. (2006). Projects and project managers: The relationship between project managers' personality, project types, and project success. *Project Management Journal*, 37(5), 36-48.
- [16]. Patanakul, P., Iewwongcharoen, B., & Milosevic, D. (2010). An empirical study on the use of project management tools and techniques across project life-cycle and their impact on project success. *Journal of General management*, 35(3), 41-66.
- [17]. Freeman, M., & Beale, P. (1992, March). *Measuring project success*. Newtown Square, PA, USA: Project Management Institute.

- [18]. Lim, C. S., & Mohamed, M. Z. (1999). Criteria of project success: an exploratory re-examination. *International journal of project management*, 17(4), 243-248.
- [19]. Hobbs, J. B., Pettersen, N., & Guérette, H. (2001, November). Building, validating and implementing a PM competency model: The experience of one aerospace company. In *Proceedings of the PMI Annual Symposium*.
- [20]. Pinto, J. K., & Slevin, D. P. (1988). *Project success: definitions and measurement techniques*. Project Management Institute.
- [21]. Cash, C. H., & Fox II, R. (1992). Elements of successful project management. *Journal of Systems Management*, 43(9), 10.
- [22]. Hatfield, M. A. (1995). Managing to the corner cube: three-dimensional Management in a three-dimensional world. *IEEE Engineering Management Review*, 23(4), 63-68.
- [23]. Milosevic, D., Inman, L., & Ozbay, A. (2001). Impact of project management standardization on project effectiveness. *Engineering Management Journal*, 13(4), 9-16.
- [24]. Dvir, D., Lipovetsky, S., Shenhar, A., & Tishler, A. (1998). In search of project classification: a non-universal approach to project success factors. *Research policy*, 27(9), 915-935.
- [25]. Serrador, P., & Turner, J. R. (2014). The relationship between project success and project efficiency. *Procedia-Social and Behavioral Sciences*, 119, 75-84.
- [26]. Hyväri, I. (2006). Success of projects in different organizational conditions. *Project management journal*, 37(4), 31-41.
- [27]. Shokri-Ghasabeh, M., & Kavousi-Chabok, K. (2009). Generic project success and project management success criteria and factors: Literature review and survey.
- [28]. Turner, J. R., & Keegan, A. (2001). Mechanisms of governance in the project-based organization:: Roles of the broker and steward. *European management journal*, 19(3), 254-267.
- [29]. Cloud Development For The Department: Project Tracking System, *International Journal of Advance and Innovative Research* Volume 7, Issue 1 (III): January - March, 2020 Part - 1 18 ISSN 2394 -7780
- [30]. Yan, Z., Wei, G., Dongdong, L., Lei, N., & Mengran, Y. (2020, April). University research project management system based on cloud platform. In *2020 International Conference on Big Data and Informatization Education (ICBDIE)* (pp. 453-456). IEEE.
- [31]. Retnowardhani, A., & Suroso, J. S. (2019, October). Project management information systems (PMIS) for project management effectiveness: comparison of case studies. In *2019 International Conference on Computer Science, Information Technology, and Electrical Engineering (ICOMITEE)* (pp. 160-164). IEEE.