An Overview: Project Management System Used for Industries

B. Ajithkumar
Department of Information Technology, Bharathiar University, Coimbatore, Tamil Nadu, India.

Dr. R. Vadivel
Assistant Professor, Department of Information Technology, Bharathiar University, Coimbatore, Tamil Nadu, India.

Abstract – Project management process is an administrative process for the planning and control the service or for the implementation of a project. The Project Management Process project time consuming and investment of cost will also be less and can be used during the development of new projects and old projects. The main aim of this project is to create an automated system for managing all the activities of the projects. It looks for various phases which were involved under entire development work such as analysis, system design, coding, testing and maintenance work etc. Time and money both are the important factors for any organization for existence in their market. The systems have to keep a catchy eye on every bit of their investment. This system will keep track on invested time on a particular phase and generate reports to make future analysis and take appropriate action to settle down the problem.

Index Terms – Project management, SDLC, Management methodologies, System design, Project requirements.

1. INTRODUCTION

The main aim of this paper is to gain an understanding of project management and to give an overview of the methodology that underpins most formally to run a project. In today's world, nobody took an initiative to look for notice which display on the notice boards. The workers miss the information about some important notices and updates related to their project work. Also, the workers are not able to keep track of their related activities. This project management become very easy to view all the details and to update the project and coordinator are readily available for the workers. In existing system managing the organization projects manually is a very stressful job. But in simple web portal anyone carry out their project related work which is the main aim of the project management system. This PMS provide details to employees, project coordinator and project guides in the web portal to manage and monitor the overall project activities. These project modules have a unique user id and password. Any user can login into the system using their user id and password to get authenticated further PMS allows the group of workers to provide latest project domains and then the system automatically assign the guides to the workers. Project coordinators and project guide interacted with each other. Depending upon the various parameters related to the work assigned by the coordinator, the process chart of the group is created automatically assigned for the particular group of employees. E-mail notification is sent to the group about important notices and updates related to the project.

1.1 What is project management?

Project management is that the method of coming up with, planning, scheduling, resource management, demand analysis and testing to attain project goals and objectives. While not project management it's troublesome to complete in given time. Therefore, project management is needed to get rid of such barriers to project development and to attain specific goals.

Project management is the structure of managing all the various resources and aspects of the project in such a way the resource will be easy to deliver all the output that is required to complete the full project within the time, and cost constraints. The project initiation stage and by the time the project begins all stakeholder and team members will have clear acceptance and understanding the process, methodology and expected outputs. The perfect project manager utilizes a saturated process that can be audited and used as a print of the project and this is achieved by workers project management methodology.

2. SOFTWARE DEVELOPMENT LIFECYCLE

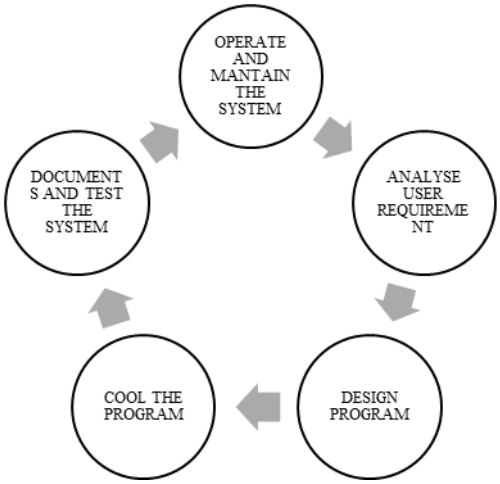

Fig.1. Software development life cycle

A software development lifecycle is basically a framework methodology for controlling and planning the creation of testing and produce the high-quality software. The software development lifecycle includes planning, building, testing and delivering a product. The software development lifecycle includes analysing user requirements, designing the software through coding. Testing and documenting has been done, and maintaining the operating software.

3. PROJECT MANAGEMENT METHODOLOGY

A standard project has four major phases, each phase has multiple checkpoints that must be met before the next phase begins. The project will be managed depending on the size. The complex projects in a large organization involves a more number of peoples, resources, time and cost. A more structured approach is needed, and there will be more steps to create each level of the project to ensure that the project delivers the end result. For a basic project in small organization, milestones of the project, a few checklists and someone to coordinate the project may all that is required.

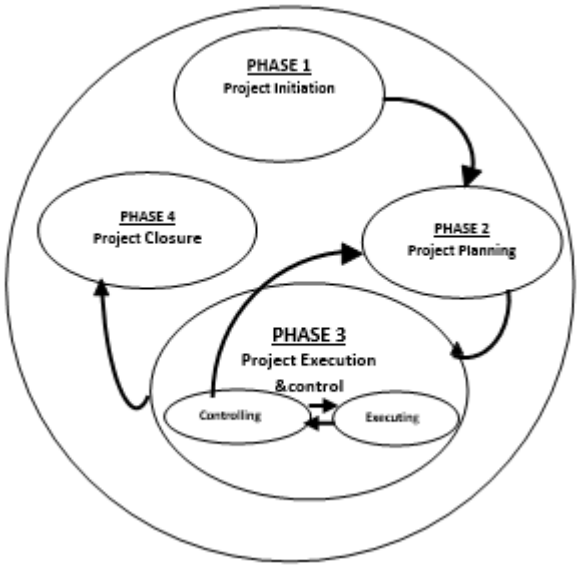

Fig.2. Project Management Methodology

- Initiation phase.
- planning.
- Implementation (execution) phase.
- Closure phase.

a) Initiation phase

The first phase is initiation phase, the objective or need will be identified .This can be due to business issues or opportunity. A flexible study is conducted where each option addresses the project object and a final solution is determined. Issues of adaptability ("can the undertaking should be possible?") and legitimization ("should the venture must be done?") are addressed.

Once the recommend solution is approved, a project is delivered as the approved solution and a project manager is appointed. The major participating work group are identified, and the project team begins to take a shape. The approval is then sought by the project manager to move onto the details planning phase level.

b) Planning phase

The planning phase is the second phase of the project development lifecycle. In planning step, the project team identifies all of the work to be finished. The resource requirement and project tasks are identified, along with the strategy for producing them. The planning management also referred to as “Scope Management system”. A project planning team creates the outlining activities, dependencies, task details and timeframes. The project manager will prepare and decide the project cost estimation for labours, equipment and for materials. The planning monitors and controllers cost the expenditures the upcoming project implementation. The project manager have to identify the work for the project, prepared a schedule and estimated the amount of projects. The three main fundamental components of the planning process are completed.

Finally, you'll wish to document a top quality arrange by providing quality targets, assurance, and management measures. Then associate degree acceptance arranges the listing factors to be met to realize client acceptance. At this time, the project would be planned intimately and is prepared to be dead.

c) Implementation phase

The third phase is the implementation phase, in this project plan is performed. It is one of the important phase to maintain control and communicate as needed while during the implementation. The project manager spends most of the time to stop the project phase. While during the project implementation, people are carrying out the tasks, and progress information is being reported via regular team meeting. The project manager controls the overall direction of the project by comparing the reports with the project plan to measure the performance of the project activities and to take corrective action as they needed the project sponsors and another key stack holder should be kept informed by the project status according to the agreed-on format of communication and frequency. The project plan should be updated and published on regular basis.

d) Closing phase

The final closure phase is the emphasis on releasing the final deliverables to the customers, handling overall project documentation to the business, deleting the supplier contracts,

and to release project resources, and communicating the closure of the project to all stockholders.

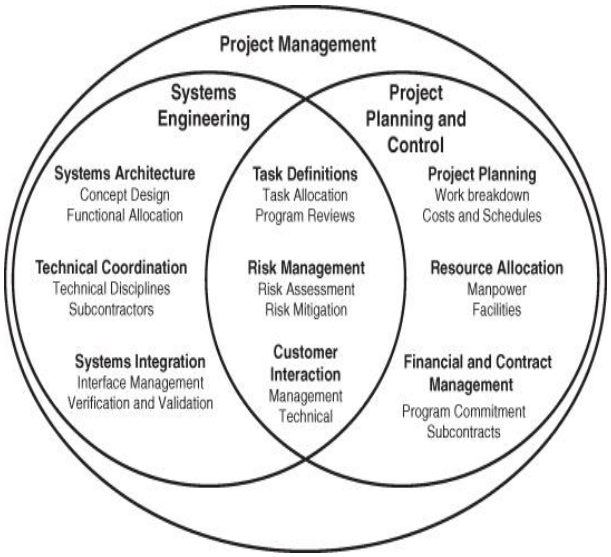

Fig.3. Project Management System

4. EXISTING SYSTEM

The present system always face the time problem during their development work by which there exists extra investment and sometimes losing their markets due to criticism. All the works were maintained by using manual file process by which it will create difficulties for the organization to prepare the reports on projects. It's difficult to the managers to keep track of their projects which are working by different teams and the immediate action to complete the projects within stipulated time. A manual system not able to provide alerts and notification for the important ones based on their maximum time involved and current status along with predictions for their deadlines.

- It's time intense.
- Right information doesn't retrieve at right time.
- Any updates or info to the team members or the project organizer or guide cannot seen at once by the remaining of the team.
- All work is finished manually.

5. PROPOSED SYSTEM

The vital issue which is able to be thought-about during this new system is time. Before beginning any new project, the manager will set the point time and date thru alert settings; the system can ready to inform its team members and managers before one week. With the assistance of this, the team will check their project standing and take necessary actions if needed. The system also will ready to categorize the actual comes upon totally different modules and have look on them as and once needed. This technique also ready to give the list of workers of World Health Organization square measure concerned in an exceedingly specific project for a specific module and time concerned in development work. Through its integral report builder section, it will prepare a transparent image of your time endowed on the various level of comes.

6. SYSTEM DESIGN AND CONSIDERATION

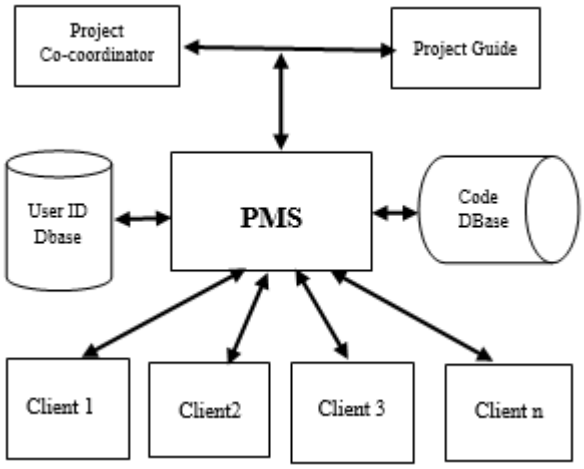

Fig.3. PMS Design and Consideration

7. DESIGN PHASE

Modules

Project coordinator module

1) Login: - Using username and password Project coordinator login into respected computer system. If authentication is fail or Problem Project coordinator cannot login into system.
2) Upload updates: - Project coordinator uploads and updates the project related work.
3) Upload file:- Project coordinator upload file for employee's information.
4) View Files: - Project coordinator View all files uploaded by employees.
5) View Gant Chart: - Project coordinator views Gant chart of employees working.

Project guide module

1) Login: - Using username and password Guide login into their computer system. If authentication failsdue to problem the guide cannot login into system.
2) Upload file:- Guide uploads the file for the employee's information.
3) View Files: - Guide View all files uploaded by the employees.

4) View Gant Chart: - Guide view Gant chart of employees working.

Employee module

1) Employee Login: - Using username and password employee login into theircomputer system. If authentication fails, employees cannot login into system.
2) View updates: -Employee views all updates of the work which uploaded by Project coordinator or guide.
3) Upload file:- employee upload file and submit the completed work.
4) 4) View Gant Chart: - employee view Gant chart of employees working.

8. CONCLUSION

Software project management system (PMS) is a Web-based application and Project management system has many more advantages. It will manage all software projects, gathering more information and add more information about a project in database that can be retrieved by browsing or searching for the different project. Privilege has been done in a way that guarantees the security of the system. Employee information is available for project managers so they can decide who can be assigned for the tasks in the project. The Project management system helps the company to achieve and produce more software projects.

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