Effective Use of Different Phases in Project Management Life Cycle and Ecosystem

Prof. Anjana R Arakerimath

Associate Professor, MCA Dept, PCCOE Pune

Mr. Mrunal Sul

Student MCA, PCCOE Pune, India

Abstract: This paper explains project Lifecycle and its key categories, activities and its phases. Projects are a challenging across industries and a good understanding of Project Management Lifecycle is an important first step in successfully implementing projects. Projects come in all shapes and sizes - but they always involve spending real money to make them and are constantly being considered. Businesses are constantly evolving costs and investments while trying to maximize business profits in those applications. Succeeding at projects to bring about the value of a business that is intended to deliver is an important - and probably most important – aspect. How Project Life Cycle is important and following the right path will lead to a successful project. The different phases with an example at the last is been mentioned in this paper.

Keywords: Project Management, Life cycle, Project Management. Ecosystem

Literature Review:

A leadership and Decision Making in the Project Management Life Cycle: A Knowledge Management Perspective:

All organizations are adopting the project-based approach to carry out operational and business activities. There are many challenges of knowledge management during the project management life cycle because every project has unique characteristics with a changing workforce [3].

Critical success factors across the project life cycle:

The purpose of this article is to report on the results of a recent study that was conducted in an effort to test the importance of those factors that have long been believed to be critical to project success. And how is Project Management life cycle useful for a project to go in a systematic manner and have a success at the final.

Introduction

Project management is increasingly important to organizations because projects are the method by which organizations respond to their environment [5]. The life cycle of project management can be defined as a systematic, timely and systematic process of successfully implementing, planning and implementing a project to achieve a successful outcome - that is, to meet the intended goals of the project sponsors.

Project Management Life Cycle

The level of formality and complexity of the lifecycle for each project is constrained by any number of factors, including budgetary constraints, project team experience, project size, and project complexity. The five Project Management steps will help you plan and organize your projects so that it goes off without any issues. According to the Project Management Book of Knowledge (PMBOK), the Project Management life cycle should define the following aspects:

- a) What work needs to be achieved?
- b) Who will be involved in the team?
- c) What are the project deliverables?
- d) How to monitor the performance of each phase?

The 5 steps of project management Life Cycle

1. Project Initiation

Project implementation is the first phase of the Project management life cycle, where the project begins. It provides project details, as well as strategies needed to achieve the desired results. It is the stage at which you determine the feasibility and the business value of the project. After making the final decision to proceed, the

project can move on to the next step: that is, to assemble the project team. a] Do the Feasibility Study b] Find the Scope of the Project c] Identify the delivery Project d] Project Identification of Stake holders e] Create a business Case [2]. Before building a business case, check whether key project pillars such as feasibility, scope, and stakeholder identification exist. The next step is to come up with a complete business case.

2. Project Planning

Many project-related planning takes place at this stage. In defining the objectives of the project, it is time to create a project plan for everyone to follow. The planning section sets out a set of programs that help guide your team in the implementation phase and closing phase. The system created at this point will certainly help you to control costs, quality, risk, changes, and time. The project planning phase includes the following components:

- al Building a Project Plan,
- b] Creating a Resource Plan
- c] Budget Estimates
- d] Collecting Resources
- e] Anticipation of Potential Quality Risks and Barriers

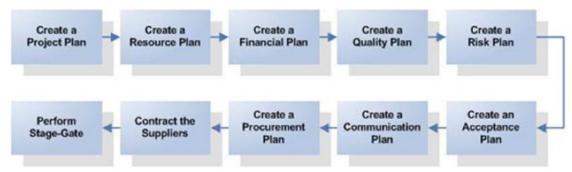


Fig 1: Project planning activities

3. Project Execution:

Project implementation is the stage at which project-related processes are performed, tasks are assigned, and resources are allocated. The approach also involves delivering and satisfying customer needs. Project managers or team leaders accomplish a task by providing resources and keeping team members focused.

The team involved will begin building the project delivery and seek to achieve the project objectives and objectives as outlined in the project plan. The success of a project mainly depends on the stage of project implementation. The final project, which will be delivered, is also built during the project implementation phase. There are a number of important things that are taken care of during the execution phase. Listed below are just a few of them:

- 1. Reporting Project Progress
- 2. Hold Regular Meetings
- 3. Manage Problems

4. Project Monitoring and Control

The project monitoring and management phase is about measuring project performance and tracking progress. Used during the execution phase. The main purpose of this section is to check whether everything is in line with the Project Management Plan, especially with regard to financial and time limits.

It is the responsibility of the project manager to make the necessary changes related to resource allocation and to ensure that everything goes smoothly. Monitoring project work after the project implementation phase will allow the project manager to take corrective action.

5. Project Closure:

The project closure phase represents the final phase of the Project Management life cycle, also known as the "follow-up" phase. At this point, the final product is ready for delivery. Here the main focus of the project manager and team should be on product release and product delivery. At this stage, all project-related activities are wrapped up. Sometimes a project may need to be closed due to a project failure.

Once a project has been completed and delivered on time to clients, it is the project manager's responsibility to highlight strengths, list project priorities, identify ambiguities and suggest how they can be addressed in future projects. Taking the time to recognize strengths and weaknesses will help to manage projects

with great dedication; this, in turn, builds the credibility of the project manager. Once the product has been delivered to customers, documents are finalized, the project team is disbanded, and the project is closed.

Project life cycle with Example: Development of a software tool

1. Project Initiation:

The established company has identified an opportunity in the market to develop a software tool that will be useful in tracking staff time. In the initial phase of the project, the potential market is estimated to be large. The cost of doing the work is estimated, as well as the time to deliver it [6]. The project receives approval. A professional project manager is found to lead and oversee the work.

2. Project Planning:

The established company has identified an opportunity in the market to develop a software tool that will be useful in tracking staff time. In the first phase of the project, the potential market is estimated to be large. The cost of doing the work is estimated, as well as the time to deliver it. The project receives approval. A qualified project manager is found to lead and oversee the work.

3. Project Execution:

The project begins. The project manager manages the day-to-day operations, making sure everyone stays on track. One person breaks an arm and becomes ill. By working with the development team manager, the project manager is able to negotiate whether someone else can come in to take his or her place.

4. Project monitoring and control:

As the work progresses, the business owner suddenly thinks it would be good to add another element to the development of the software project. Through the project change management process, the project manager points out to the business owner that this will raise project costs by \pounds 50K and lead to a three-month delay in project delivery. The business owner decides not to make the change and the project progresses as planned.

5. Project Closure:

During the closing phase, project evaluation indicates that needs can be better defined and should be better defined during project implementation. This would help to prevent the identification of another element that was needed later in the system which could not be maintained. The team agrees with the solid exit phase of the project requirement for future projects.

Project Management Ecosystem

Projects don't exist in isolation they are influenced by two strong factors, the internal and external environment. A project depends on three basic components: processes, people and tools, all integrated and influenced by the [8] internal environment (the organization) and an external environment (the world), this is the project ecosystem. The graphic below shows the tight interdependency among these elements:

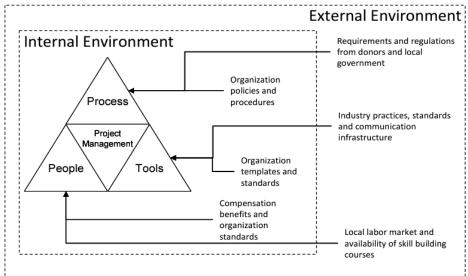


Fig 2: Project management ecosystem

The Project Management phases follow a cyclical approach throughout the life of the project. The cycle represents a continuous process in which each phase provides the foundation for the next. For example, during implementation the monitoring phase provides inputs and changes to the original design which then modifies the implementation plans. These cyclic nature among the design, implement and monitor phases is repeated throughout the life of the project.

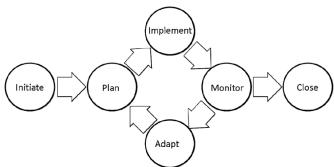


Fig 3: Project management Cycle.

Conclusion

Understanding what happens at the different phases of the project life cycle helps with smooth running projects. Any organization or a project developer should follow the project management life cycle for the project's success. During the project life cycle (PLC), project managers as well as top management are not only the aesthetic words in project executions but they also increase the competence and credentials of project executions. With the strategies of planning, monitoring, controlling, evaluation, responsibility of project manager and authority of top management project become successful with all its good enactment.

- It helps professional service teams to become competent and profitable.
- The project life cycle helps the organization.
- It makes the communication process easier.
- The information emphasizes reporting and evaluating past projects.

References:

- [1]. R. B. Rowen, Software Project Management Under Incomplete and Ambiguous Specifications, IEEE Transactions on Engineering Management, vol. 37, no. 1, 1990
- [2]. The Project Management Life Cycle: A Complete Step-by-step Methodology for Jason Westland Google Books 2009
- [3]. The Project Management Life Cycle, By Jason Westland. 2007.
- [4]. Leadership And Decision Making In The Project Management Life Cycle: A Knowledge Management Perspective (researchgate.net)
- [5]. The Project Management Life Cycle by Jason Westland (A book review by R. Max Wideman) 2005
- [6]. B. Boehm, A Spiral Model of Software Development and Enhancement of Software Engineering Project Management, pp. 128-42, 1987.
- [7]. Haluk Altunel, Soft Tech A.S., Ankara, Turkey. Agile Project Management in Product Life Cycle. International Journal of Information Technology Project Management Volume 8, Issue 2, April-June 2017.
- [8]. Project Management for Development organizations. pm4dev, 2020 –management for development series.