

**A  
SEMNAR REPORT  
ON  
IMPLEMENTATION OF STUDENT PROJECT MANAGEMENT SYSTEM**

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## INTRODUCTION

**Project management** is the process of leading the work of a team to achieve all project goals within the given constraints. This information is usually described in project documentation, created at the beginning of the development process. The primary constraints are scope, time, and budget. The secondary challenge is to optimize the allocation of necessary inputs and apply them to meet pre-defined objectives.

The objective of project management is to produce a complete project which complies with the client's objectives. In many cases the objective of project management is also to shape or reform the client's brief to feasibly address the client's objectives. Once the client's objectives are clearly established they should influence all decisions made by other people involved in the project – for example project managers, designers, contractors and sub-contractors. Ill-defined or too tightly prescribed project management objectives are detrimental to decision making.

A project is a temporary endeavor designed to produce a unique product, service, or result with a defined beginning and end (usually time-constrained, and often constrained by funding or staffing) undertaken to meet unique goals and objectives, typically to bring about beneficial change or added value. The temporary nature of projects stands in contrast with business as usual (or operations), which are repetitive, permanent, or semi-permanent functional activities to produce products or services. In practice, the management of such distinct production approaches requires the development of distinct technical skills and management strategies

Project management methods can be applied to any project. It is often tailored to a specific type of projects based on project size, nature, industry or sector. For example, the construction industry, which focuses on the delivery of things like

buildings, roads, and bridges, has developed its own specialized form of project management that it refers to as *construction project management* and in which project managers can become trained and certified. The information technology industry has also evolved to develop its own form of project management that is referred to as *IT project management* and which specializes in the delivery of technical assets and services that are required to pass through various lifecycle phases such as planning, design, development, testing, and deployment. *Biotechnology project management* focuses on the intricacies of biotechnology research and development. *Localization project management* includes application of many standard project management practices to translation works even though many consider this type of management to be a very different discipline. There is public project management that covers all public works by the government which can be carried out by the government agencies or contracted out to contractors. Another classification of project management is based on the hard (physical) or soft (non-physical) type.

Common among all the project management types is that they focus on three important goals: time, quality, and budget. Successful projects are completed on schedule, within budget, and according to previously agreed quality standards i.e. meeting the Iron Triangle or Triple Constraint in order for projects to be considered a success or failure.

For each type of project management, project managers develop and utilize repeatable templates that are specific to the industry they're dealing with. This allows project plans to become very thorough and highly repeatable, with the specific intent to increase quality, lower delivery costs, and lower time to deliver project results.

## **PROJECT MANAGEMENT PROCESS**

Project management process is an administration process for the planning and control of the services or the implementation of a project. This process begins after the approval by the customer, is based on the contract, and is targeted on the initial values of the process and the general management of a project. The project management process requires a specific configuration that contains the project management documentation; project plans; project management methods; information exchange (individual interviews, project meetings, project workshops etc.); resources for the project planning and project implementation. The following aspects should be performed during the project management process: project introduction; project planning; project realization; project control; analysis and assessment of the project relevance. The results of one of these processes are: delivery of the project product; achievement of the project objectives; documentation of the learning processes. (Paul C. Dinsmore et al., 2005)

## **PHASES OF PROJECT MANAGEMENT**

The amount of planning and work required to complete a project can seem overwhelming. There may be dozens or even hundreds of tasks that need to be completed at just the right time and in just the right sequence. Project managers often find it easier to manage the full scope of a project by breaking it down into five project phases that make up the project management life cycle.

Dividing your efforts into these five project management phases can help give them structure and simplify them into a series of logical and manageable steps.

## **Phase 1: Project Initiation**

The first phase of the project management life cycle is project initiation. This is where the project's value and feasibility are measured. Project managers typically use two evaluation tools to decide whether or not to pursue a project:

- **Business Case Document** – This document justifies the need for the project, and it includes an estimate of potential financial benefits.
- **Feasibility Study** – This is an evaluation of the project's goals, timeline and costs to determine if the project should be executed. It balances the requirements of the project with available resources to see if pursuing the project makes sense.

Teams abandon proposed projects that are labeled unprofitable and/or unfeasible. However, projects that pass these two tests can be assigned to a project team or designated project office.

## **Phase 2: Project Planning**

Once the project receives the green light, project managers need a solid project plan to guide their team, execute the project on time and stay within the budget. A well-written project plan gives guidance for obtaining resources, acquiring financing and procuring required materials. The project plan gives the team direction for producing quality outputs, handling risk, creating acceptance, communicating benefits to stakeholders and managing suppliers.

The project plan also prepares teams for the obstacles they might encounter over the course of the project and helps them understand the cost, scope and timeframe of the project.

### **Phase 3: Project Execution**

This is the phase that is most commonly associated with project management. Execution is all about building deliverables that satisfy the customer. Team leaders make this happen by allocating resources and keeping team members focused on their assigned tasks.

Execution relies heavily on the planning phase. The work and efforts of the team during the execution phase are derived from the project plan.

### **Phase 4: Project Monitoring and Control**

Monitoring and control are sometimes combined with execution because they often occur at the same time. As teams execute their project plan, they must constantly monitor their own progress.

To guarantee delivery of what was promised, teams must monitor tasks to prevent scope creep, calculate key performance indicators and track variations from allotted cost and time. This constant vigilance helps keep the project moving ahead smoothly.

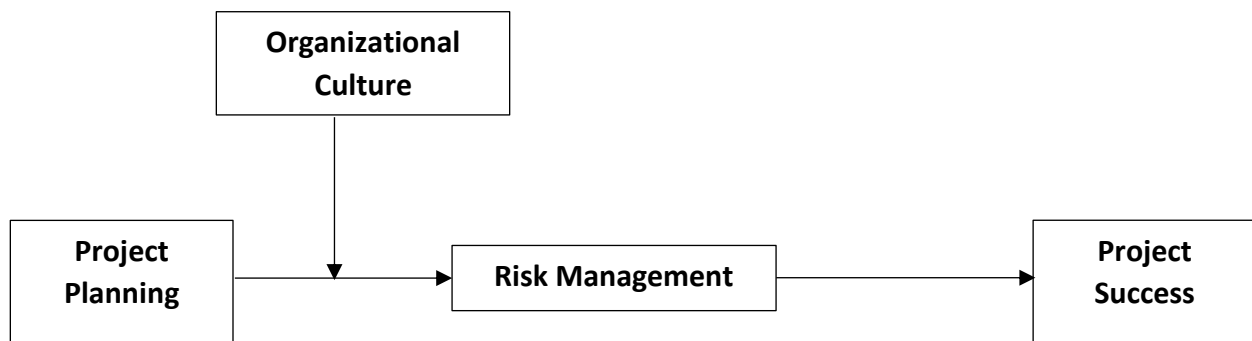
### **Phase 5: Project Closure**

Teams close a project when they deliver the finished project to the customer, communicating completion to stakeholders and releasing resources to other projects. This vital step in the project management life cycle allows the team to evaluate and document the project and move on to the next one, using previous project mistakes and successes to build stronger processes and more successful teams.

Although project management may seem overwhelming at times, breaking it down into these five distinct project phases can help your team manage even the most complex projects by using time and resources more wisely.

## **RELATIONSHIP BETWEEN PROJECT PLANNING AND PROJECT SUCCESS**

Success on a project implies that specific desires for a given member are met, whether proprietor, organizer, designer, temporary worker, or administrator. The accompanying are some different dentitions of "Project Success" in general: Project success is alluded as having results much superior to anything expected or typically saw as far as cost, calendar, quality, security, and member fulfillment (Ashley et al., 1987). Success for a given project member as how much project objectives and desires are met. They included that these objectives and desires may incorporate specialized, financial, instructive, social, and expert angles. (Sanvido et al., 1992).



**Fig.1 Research Model**

## **PROJECT MANAGER**

The term project manager refers to the person in charge of a project. The project manager should have project management skills, as they are responsible for planning, monitoring and executing a project by carefully balancing the scope, time and budget. This also makes the project manager the first point of

contact for all project stakeholders, should any issues arise in the course of the project.

**Key objectives of a project manager are:**

- Maintaining the project progress
- Coordinating the interaction among the project team
- Managing the project resources

in order to reduce risk and ensure overall project success. The person in the role of project manager therefore rarely takes on tasks or participates in the activities. They rather focus on the administrative and managerial aspects of a project. Often, project managers hold project management certifications and have expertise in certain project management methods.

In the past, it was common to distinguish between the role of project manager, the person with project management skills, and the role of project leader, who typically has professional know-how in the industry and leadership skills. Nowadays, as businesses' strategies are more project oriented, the two roles are merged in the one of the project manager. That means, project managers are increasingly expected to have project management skills, as well as industry or professional know-how and leadership skills.

**Project Management Software**

Project management software is software used to help plan, organize, and manage resource pools, develop resource estimates and implement plans. Depending on the sophistication of the software, functionality may include estimation and planning, scheduling, cost control and budget management, resource allocation, collaboration software, communication, decision-making, workflow, risk, quality, documentation, and/or administration system.



## **Examples of Project Management Software**

* Scoro	* ClickUp	* ProofHub	* Basecamp
* Asana	* Workzone	* Jira	* Notion
* Trello	* Redmine	* FunctionFox	* Nutcache
* Cage	* Paymo	* Brightpod	* Weekdone
* MS Project	* Avaza	* Freedcamp	* ProWorkflow
* SmartSheet	* Highrise		

## **CONCLUSION**

The concept of project management is well defined and understood. Martin Cobb (1995) stated: “We know why projects fail; we know how to prevent their failure—so why do they still fail?”. The authors assert that systemic project failure is a failure of organizational governance. The art of good governance is striking the right balance between restrictive processes to prevent malfeasance, and allowing management the freedom to support effective growth and innovation thus facilitating the achievement of strategic goals of the organization.

As more and more organizations are expected to manage multiple projects to achieve competitive advantage, executive, management and project practitioners will be looking to academic institutions, government and professional bodies and the experience of practitioners in the field to lead the way in developing more effective and efficient governance frameworks. The conceptual framework described in this paper is offered as a foundation template to be tested empirically in future research. These studies can then develop a more comprehensive framework that improves the success rate of projects and programmes, but more importantly, to enable organizations to act decisively, ethically and comprehensively by using a project approach to deliver benefits to the organization and its stakeholders.

## REFERENCES

- (2003). *PMP Project Management Professional Study Guide*. McGraw-Hill Professional, 2003. ISBN 0-07-223062-2 p.354.
- Ashley, D. B., Lurie, C. S., & Jaselskis, E. J. (1987). Determinants of construction project success. Project Management Institute.
- Baratta, Angelo (2006). *"The triple constraint a triple illusion"*. PMI. Retrieved 22 December 2020.
- "Certified Construction Manager"*. CMAA. Retrieved 23 November 2013.
- "Certificate in Biotechnology Project Management"*. University of Washington. Retrieved 23 November 2013.
- Paul C. Dinsmore et al (2005) *The right projects done right!* John Wiley and Sons, 2005. ISBN 0-7879-7113-8. p.35 and further.
- Sanvido, V., Grobler, F., Parfitt, K., Guvenis, M. & Coyle, M. (1992) Critical success factors for construction projects, *Journal of Construction Engineering and Management* 118(1): 94-111.
- The Definitive Guide to Project Management*. Nokes, Sebastian. 2nd Ed.n. London (Financial Times / Prentice Hall): 2007. ISBN 978-0-273-710am97-4 Parameter error in {{ISBN}}: Invalid ISBN.
- "What is Project Management?"*. Project Management Institute. Retrieved 2014-06-04.