

# **PROJECT DEVELOPMENT & MANAGEMENT**

## **PROJECT INITIATION**

### **Abstract:**

All over the world, organizations invest billions of dollars in the development, execution and delivery of projects annually. Besides being capital or operational, these projects are diverse in nature in terms of location, desired outcome and the circumstances that lead to their implementation.

For any project to be successful, it must effectively deliver on Safety, Quality, Time and Budget.

The 4 major phases of a project are Initiation, Definition, Execution, and, Handover & Close-out. Each of these phases must be effectively managed. The process of ensuring effective project delivery is termed Project Management.

This paper describes the steps to ensuring clear project initiation. The goal of project initiation phase is to ensure appropriate description of the idea (opportunity, problems, etc.), indication as to the potential solutions available, cost and timing requirements and an outline of how the idea is to be further defined, evaluated and progressed and an estimate of the cost & timing for completing further definition and evaluation of the idea.

**Key Words:** *Project, Project Management, Phase, Safety, Quality, Time, Budget, Planning, Stakeholders, Resources, Estimate, Initiation, Options, Idea/Opportunity, Business Benefits, Organizational Objectives.*

### **Project & Project Management:**

A project is an activity or a group of activities with a defined scope, execution timeframe and an established budget. Thus a project must have:

- A desired outcome (encompassing Quality/Performance & Safety)
- Start & Finish dates, and

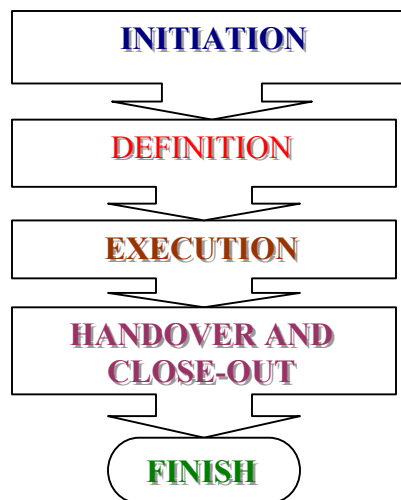
- An established budget (in terms of **M**en (i.e. people), **M**oney, **M**achines, **M**aterials & **M**an-hours – the 5Ms of a Project).

Project Management is the process of Planning, Organizing, Leading & Controlling a project such that defined **desired outcomes** are **safely** met within specified **timeframe** and **budget**. It is the process of ensuring effective project delivery.

### **Project Phases:**

The different phases of a project are:

- Initiation
- Definition
- Execution, and
- Handover & Close-out.



#### Initiation Phase:

The main goal of participants during this phase should be to identify, assess and develop an idea/opportunity with a view to establishing its benefits and how well it fits into the organization's broader picture. Activities during this phase should end up with options to be evaluated during the next phase of the development process in the event that the stakeholders give the nod for a further definition of the idea/opportunity.

#### Definition Phase:

Depending on the “value and size of the idea/opportunity”, activities in this phase are usually further broken down into Pre-feasibility

and Feasibility Studies. Where the definition phase is not broken down into Pre-feasibility and Feasibility Studies, the goals as defined under Pre-feasibility and Feasibility Studies below should still apply as much as is desirable.

The primary goal of a pre-feasibility study should be to further define an idea or opportunity such that the various conceived options (during the initiation phase) are reduced to a single preferred option after a detailed comparative technical & commercial evaluation.

Following from the above, the main objective of a feasibility study should be to justify an optimal case for technical and economic viability of an idea, the risk and reward profile to a level of confidence required to enable the stakeholders take a decision to proceed/not proceed with the execution.

At the end of the definition phase, most of the deliverables listed below (though not exhaustive) should be available:

- Justification
- Workslope
- Estimate (& Work) Breakdown Structure (EBS/WBS)
- Detailed Design Drawings & Specifications @ ~60% complete
- Estimate, with +/-10% level of accuracy
- Master Schedule
- Key Performance Indices
- Delivery Method
- Contracting Philosophy/Strategy
- Execution Plan
- Identification of Key Personnel

#### Execution Phase:

After the stakeholders have given an idea/opportunity a “thick green tick” for implementation after definition, the next phase is Execution (i.e. when it actually becomes a project). During this phase the following should either be carried out regularly, implemented or made available, as a minimum:

- Resources Allocation

- Execution kick-off
- Preparation of Project Processes & Procedures
- Contracts Award
- Detail Design Drawings and Specifications
- Change Management System
- Risks & Opportunities Register
- Meetings and Regular Reviews
- Progress Reports (including Schedule updates, Earned Value, and Commitments, as a minimum)
- Commissioning, Performance Test & Handover Plan
- Training Plan for Operating Personnel
- Undertake Pre-commissioning
- Preparation of Deficiency List

#### Handover and Close-out Phase:

Once an idea/opportunity becomes an executed project, the handover/close-out phase must happen naturally. This phase consists of:

- Commissioning & Performance Testing
- Completion of Deficient Items
- Completion of As-built Documentation
- Project Personnel Assessment & Redeployment
- Close-out Report
- Handover to Operations
- Conduct Post Implementation Review and Lessons Learnt
- Communication of Project Learning's
- Archiving of Project Data

### **INITIATION PHASE**

This phase involves identification, assessment and development of an idea/opportunity and associated business benefits (Health, Safety, Environment & Community - HSEC, Economics, etc.), ensuring that this idea is aligned with the broader organizational picture/objectives and then obtaining appropriate support and funding from stakeholders in order to fully define, evaluate and assess the economics of the opportunity.

The **steps** to effectively completing this phase are:

- Define the idea/opportunity, problem or business/process re-engineering idea that needs to be evaluated.
- Receive stakeholders' input – This is necessary so that there may be a clearer understanding of the idea/opportunity/problem to be evaluated and all potential solutions that should be considered.
- Use relevant 'Continuous Improvement (ci)' tools to identify/select and/or solve business/process improvement riddle. The tools may include, but not limited to Project Selection, Process Mapping, Root Cause Analysis, Statistical Analysis, Solution Selection, Statistical Process Control, etc.
- Develop appropriate data – This should include alignment with organizational objectives, specific business objectives to be achieved through the idea/opportunity and, very importantly, key assumptions. The data could include likely outcome, specifications, CAPEX, OPEX, forecast revenue, or desired level of improvement. This data is important, as it will guide future (further) definition of the idea/opportunity.
- Initial Planning – This should include impact of the idea on the HSEC, proposed workscope, schedule and budget including resourcing, execution, associated risks and opportunities.
- Initiation Request – This helps in documenting the need for resources (most of the 5Ms) to be made available in order to further define and evaluate the idea/opportunity. The request should clearly articulate the benefits associated with the idea/opportunity supported by key details developed during the initiation phase.