

# OIL AND GAS PROJECT MANAGEMENT PROCESSES AND RESPONSIBILITIES OF PROJECT AND LINE MANAGER

P. Ilavalagan

Assistant Professor

Department of Petroleum Engineering, AMET University, India.

**Abstract:** In oil and gas field industry when the project going to start a project management have to be set to reach the desired goal. Either the project manager or the project members works together to fulfill the project towards the success. Every project should have a proper initiation for a good completion, each have to be done by a step by step process. There were project and line manager who works from the starting to the end of a successful project. This article deal with the project management steps and processes along with the role and responsibilities of both the project and line manager.

**Keywords:** O&G Project Management, Project Processes, Line Manager, Project Manager

## Introduction

In oil and gas field after getting the project, success of acquired project can be done by proper process and management. Every oil and gas project has important persons which leads the project most important of them were line manager and project manager. If a project got sanctioned there were number of process involved to reach the goal. It's not easy having many hidden risk and unavoidable strains.

Most of the project follows six process namely from starting as initiation, design, execution, monitoring and control, maintenance and at last the completion.

## Methodology

O&G project management have some important methodology were the concern project associated team can select their suitable method.

- Traditional approaches
- PRINCE
- PRISM
- Event chain methodology
- Agile methodology

## Traditional Approaches

This method helps to find out the sequence of steps for the completion. It follows the process from initiation to completion, but not all the project follows every steps. Some may repeat design, execution, maintenance and control to redo the same to get the best result and some may get drop due to some reasons example time factor, unavailability of budget.

In the information technology stream they were step by step like linear processes hence they call this method as waterfall model. They use RUP(Rational Unified Process) to finish the given task. But RUP will be suitable for only small scales.

## PRINCE

PRINCE gives a structural method to manage the project with in a framework. When the project deviates from its actual framework it uses alternate or nearby resources to come back into their designed framework.

In this method each process were specified with their input and the output with special goal and purposes this method is an efficient control of resources.

## PRISM

PRISM is a repeatable and practical methodology to ensure the project success. This method covers the management, control and organization of a project with consideration and focus beyond the project life cycle

### Event Chain Methodology

Event chain methodology uses mathematical model that can be easily executed. For each and every risk, it can determine the reason for the risk occurring, the impact of risk on the project example: delay, increase the cost, trigger other risks also. Event chain methodology follows six major principles. They were

- Risk time and status
- Chain of events
- Monte Carlo simulation
- Critical event string
- Monitoring the performance with the chain of events
- Diagrams of the chain of Events

### Risk Time and Status

Mostly the task were not in uniform and continuous. It may be affected by external events which moves from one status to another like completed, current and late. Example for risk time and status is if delay of construction material for an construction of a building then all the other related work also get delayed.

### Chain of Events

This event creates another chains of event example a delay on the task in order to finish a collaboration who works on another project were utilized. Here the persons from other project will work on this project where as the previously worked project get delayed which is of chain of events.

### Monte Carlo Simulation

After identifying the events and event strings, use of Monte Carlo simulation to predict the risk analysis in that project. It a software were you feed the type of risk it gives the appropriate solutions.

### Critical Event Strings

Critical event are those that will severely impact the project. If we identify the risk at the starting, then we can reduce it and can mitigate the negative effect on the project.

### Monitoring performance with the chain of events:

Project manager should monitor the project and update the information regularly to avoid unwanted wastage of time in future if the same problem arise then the already resolved solution can be used.

### Diagrams of the chain of events

Diagrams will show the visual representation which shows the relationship between the events, tasks and their impacts on the projects.

### Agile methodology

Agile method is an alternative way to traditional project management, it evaluate the project direction throughout the project development process.

The main objective of the agile method is on flexibility and improvement of the projects. Their were six essential steps in the agile development they are plan, requirement analysis, design, testing and deployment.

### Role and responsibilities of line manager

He is an important person in any project where he works under the supervision of project manager. The role of line manager is to recruit talented persons, train them for the project requirement and he have to monitor each individual and give feedback analysis to each and everyone. He have to do ground duty in monitoring on the field and have to report at the end of the day to project manager.

### **Role and responsibilities of project manager**

He is the head of the project where he plan, Define the scope, planning the activities and sequencing it in order, planning the resources for the project, developing a schedules, estimating the time and cost, developing budget and documentation risk analysis. He plan every thing and gives instruction to the line manger and the line manager have to work on the given schedule and finish the project

### **Conclusion**

Every project will have to face certain risk, if proper planning have done the risk factor can be done. Risk analysis of expected and unexpected things in the project leads to a successful goal at last. Based upon the need and requirement any methods can be chosen for the management of project in oil and gas industries. Line manager and project manager should work together to achieve the projects goal based on the project management methods.

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