

Imperatives of Professionalizing Project Management

25th October 2010

Time: 1430-1530 hrs

Mirza Ghalib Hall, Scope Complex



What is a Project?

A project is a *temporary endeavour* undertaken to accomplish a *unique* product or service with a *defined start* and *end point* and *specific objectives* that, when attained, signify completion.

What is Project Management?

Project management is the *application of knowledge, skills, tools, and techniques* applied to project activities in order to meet or exceed stakeholder needs and expectations from a project.



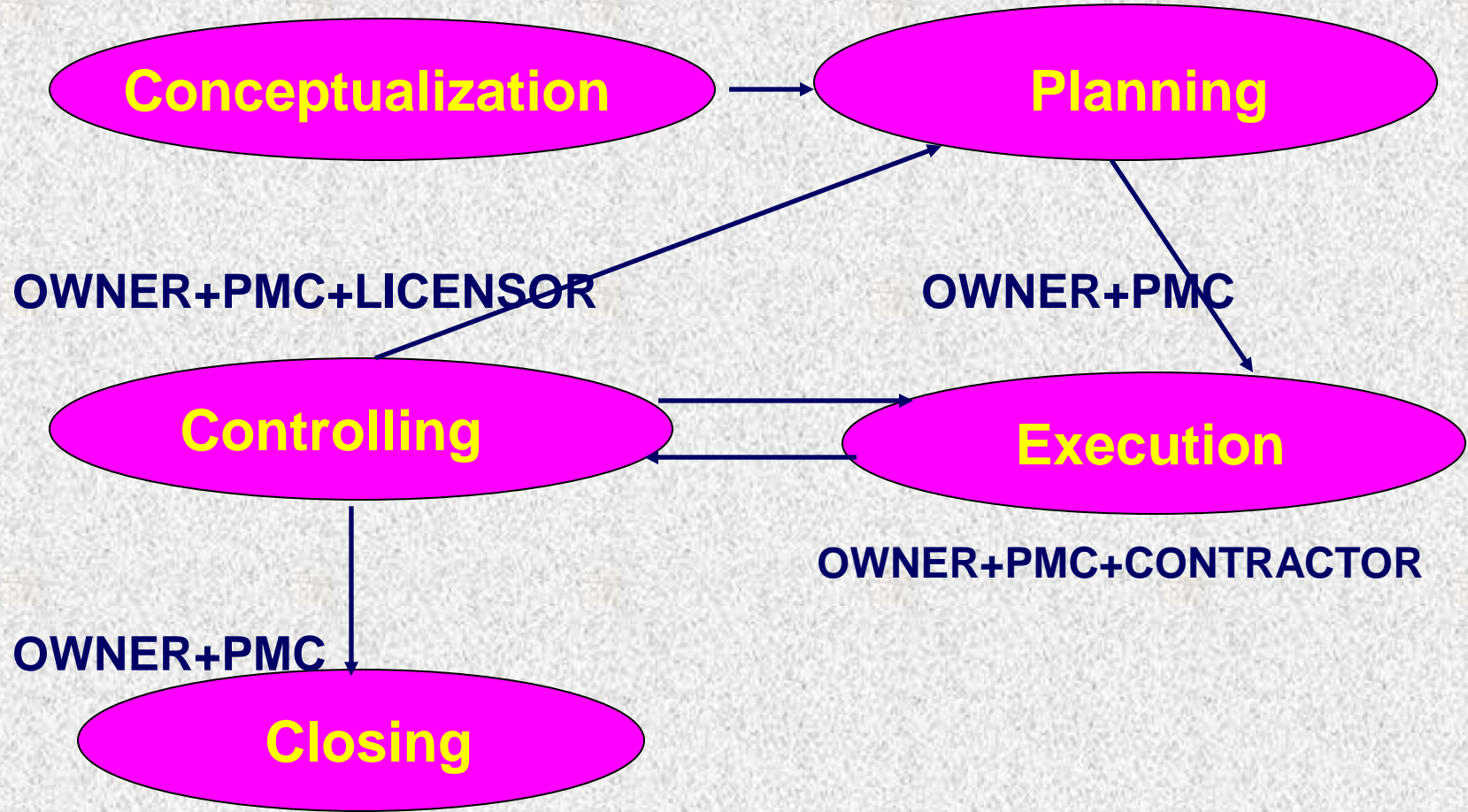
Why do we need to Professionalise Project Management?

The three prime objectives of project management are:

- *To meet specified performance*
- *To do it within specified costs*
- *Complete on schedule*



Five Processes of Project Management



Legend: PMC – Project Management Consultant

Key Players Involved in Plan-Projects

✓ OWNER

- Overall Project Coordination- Generally by HQ
- Execution – Respective Refinery Location

● LICENSOR

- Supplier of Process Technology

● PMC (Project Management Consultant) for LSTK mode

● EPCM (Engineering Procurement & Construction Management Consultant) for Conventional mode

● CONTRACTORS

- LSTK Contractors
- Conventional (Item rate / Package)

● SUPPLIERS

- Packages
- Equipment & Materials

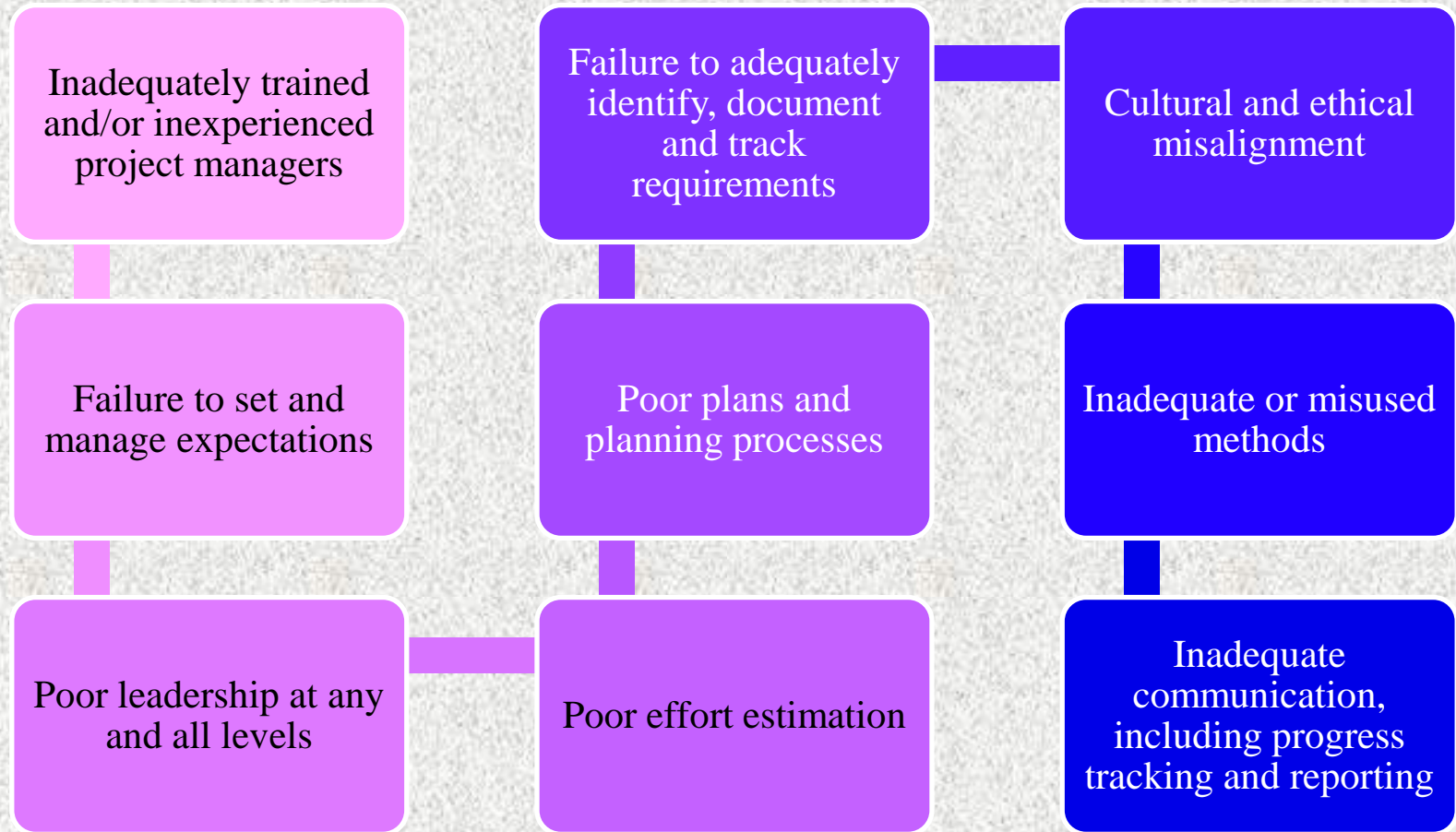


Execution Methodologies : Responsibilities

Description	Conventional	LSTK	Hybrid
Establish Design engineering basis, Enabling jobs for site infrastructure.	Owner	Owner	Owner
Engage Process Licensor for Technologies - provides BEP.	Owner	Owner	Owner
P&IDs, Residual process design, FEED.	PMC	PMC	PMC
Detailed Engineering.	PMC	LSTK	PMC,LSTK
Awarding LSTK Contracts	-	Owner, PMC	Owner, PMC
Procurement & Contract awards.	Owner, PMC	LSTK	Owner,PMC, LSTK
Construction Management, Planning & Scheduling etc.	PMC	LSTK	PMC,LSTK
Start up & Commissioning.	Owner	LSTK	Owner, LSTK



Why do Projects fail?



Growth Oriented MoU for 2010-11

FOCUS POINTS:

- Oil Sector Vision 2015- MOP&NG, GOI
- Shared Vision of IOCL.
- Customer Satisfaction
- Expansion in Rural Areas.
- Innovative R&D
- **High Priority for timely completion of Major Projects**

MoU With GOI (MOP&NG) 2010-11

Mou Performance Evaluation Parameters

Category	Weightage in %
Financial Parameters	50.0
Sector Specefic Parameters	9.5
Project Implementation /Capital Exp.	8.0
Enterprise Specefic Parameters	7.5
Customer Satisfaction	5.0
CSR	5.0
Sustainability	5.0
R&D	5.0
Misc.(HRD/Quality/Globalaization etc.)	5.0

100.0



IOCL main Projects (Cost & Schedule)

Name of Project	Cost (Rs. Cr.)	Approved on	Comm.
Naphtha Cracker Project at Panipat (PNCP)	14439	Dec'06	Mar'10
Improvement in Diesel quality & distillate yield (Hydrocracker) at Haldia Refinery	2869	Oct'06	May'10
Residue Upgradation MS/HSD quality improvement at Gujarat Refinery (RESID-J)	6898	Nov'09	Feb'10
Panipat Refinery Additional Expansion Project (PRAEP)	1008	Dec'07	Oct'10
Panipat Refinery Additional Expansion Project (PRAEP)	1008	Dec'07	Oct'10
15 MMTPA Grassroots Refinery Project at Paradip (PDRP)	29777	Feb'09	March'12
MS Quality Project at Panipat Refinery	1131	Jan'08	Jan'10
MS Quality Project at Mathura Refinery	348	Jan'08	Feb'10
MS Quality Project at Barauni Refinery	1492	Apr'08	June'10
MS Quality Project at Guwahati Refinery	372	Apr'08	June'10
MS Quality Project at Digboi Refinery	356	Apr'08	June'10
DHDT project, Bongaigaon Refinery	1646	May'06	June'10
MS Quality Improvement at Bongaigaon Refinery	372	Apr'08	June'10



Project Performance (Exp.)-IOCL

Rs. Crore

SI	Plan Period	Planned Outlay	Actual Expenditure	% Performance
1	VII (1985-90)	1,063	756	71%
2	VIII (1992-97)@	2,704	6,933	256%
3	IX (1997-2002)	25,488	12,888	51% #
4	X (2002-07)	24,399	17,930	73%
5	XI (2007-12) (Projected)	82698		

Quantum jump in value & size of Projects handled

@ 1990-91 & 1991-92 were plan holidays. Outlay kept low due to financial crunch faced by the Government

Lower expenditure due to deferment of 5 major projects (Paradip, Px/PTA, LAB, RDS and Panipat Expansion) – Review by IRC (Investment Review Committee-Board Members) of Board



Manning of Projects : IOCL

- All manning from internal resource
- No mid level entry except specialised areas.
- Proper training before deployment with internal Experienced Resources.
- Project cells at HQ and field location
- Team leader for big as well a small groups
- Close monitoring from top at regular intervals & by Project In charges on day to day activities

IOCL's Approach

- Building project implementation capabilities was found an area of concern in post board strategy meet in 2005.
- MoU signed with **U21Global, Singapore**, 18.8.2006, for certification programme of 300 executives in Project Management for managing our mega projects.
- IOCL also tied up with **PMA**, for exposing executives in Project Management (71 already certified level D), Level C under progress.



e.g. Naptha Cracker Project at Panipat

- **Capital investment: Rs.14,439 crores**
- **Completion schedule: 42 months (**Well within Time**)**
- **During peak time more than 1500 Engineers at site of outsourced agencies and 30000 workers engaged.**
- **More than 160 million accident free man hours**
- **Around 115 IOCL Engineers at site worked for Project Execution & 200 Engineers were deployed for successful commissioning of project**

e.g. Paradip Refinery Projects: Chronology of Events

SL NO	DATES	DESCRIPTION OF EVENTS
01	SEP 16 - 1995	MOU Signed with KPC for JVC to set up the Refinery.
02	JULY-1998	Govt. approved 9.0 MMTPA Refinery by IOCL in JV with KPC at an estimated cost of Rs. 8,270 Crores.
03	Aug-1999	IOCL Board approved the Project for implementation on its own at an estimated cost of Rs. 8312 Crores.
04	Feb -2000	Govt. of Orissa withdrew Tax Incentives
05	JAN 22-2001	IRC (Invest Review Committee) of IOCL's Board, decided to defer the project due to non-viability.
06	JULY -2003	Orissa Govt conveyed its willingness to extend tax incentives.
07	FEB 16-2004	MOU Signed with Govt. of Orissa.
08	SEP 24-2004	Board approved Rs. 13.50 crores for preparing DFR & EIA for a Grassroot Refinery with Petrochemicals at Paradip.

e.g. Paradip Refinery Projects: Chronology of Events

SL NO	DATES	DESCRIPTION OF EVENTS
09	MAR 25-2006	IOCL Board accorded in-principle approval for 15MMTPA Refinery with Petrochemicals and Fund approved for Pre-Project activities.
10	DEC- 2006	M/s FWEL was lined up as PMC for FEL
11	JULY 06- 2007	MOE&F Clearance Obtained for 15MMTPA Refinery with Petrochemical Complex.
12	APRIL -2008	M/S FWEL submitted the DFR with an estimated cost of Rs. 52,165 Crores.
13	MAY 28 -2008	IOCL Board approved Rs. 1627 Crores for continuing Pre-Project activity until the detailed funding proposal is finalized.
14	AUG 27 -2008	Board approved Rs. 3480 Crores for keeping the project activity going
15	FEB 28 -2009	IOCL Board approved installation of 15 MMTPA Refinery only at an estimated cost of Rs. 29777 Crores.
16	MAY 25 -2009	Project Loan Agreement and Financial Closure with M/s SBICAPS

MAJOR CHALLENGES FACED IN PDRP SINCE INCEPTION

- **Failure of Joint Venture with Kuwait Petroleum Corporation.**
- **Change in Product Market Scenario.**
- **Change in Orissa Govt. Stand on Incentives Granted to the Project.**
- **Failure of expected development of IGCC technology selected for the project.**
- **Super Cyclone of Oct'99.**
- **Dredging and reclamation.**
- **Raw water requirement of PDRP.**



MAJOR CHALLENGES FACED DURING IMPLEMENTATION

- **Project Viability after the estimated cost touched Rs. 52000 Crores as per DFR submitted by M/s FWEL in 2008.**
- **EPCM-1 tender got delayed due to procedural issues and due to the incompatibility of EPCM-1 Consultant with the realities in Indian Industry.**
- **Withdrawal of M/s TATA Group from the JV Power Plant.**
- **Local problems like multiplicity of unions, law and order problems.**
- **Local encroachment is creating hurdles in the completion of Coastal Road.**



Best Practices

- *Gather Consensus on Project Goals*
- *Build a Strong Project Team*
- *Keep the Project Documentation Up-to-date*
- *Define Project Scope*

- *Create a Practical Schedule*
- *Keep Communication Open with Stakeholders*
- *Do not Work in a Silo*
- *Lead by Example*



Professionalising Project Management

- Project Management- a distinct discipline now.
- This needs proper Education on Project Management, to professionalise -Qualification & Certification.
- Helps in developing Human resource in Project management skills in a well structured manner- Long term asset for company.
- Helps in understanding project processes and terminology
- Improves skills, knowledge and project monitoring skills
- Helps in developing global project management practices

A Well Conceptualized & Executed Project improves Productivity, Efficiency & Bottom line of the Company



Thanks