

# PROJECT MANAGEMENT CONCLAVE, 2018

Ranchi, June 2-3

*Structured Project Management – the key to Project Success*

## Structured Project Management – Across Value chain

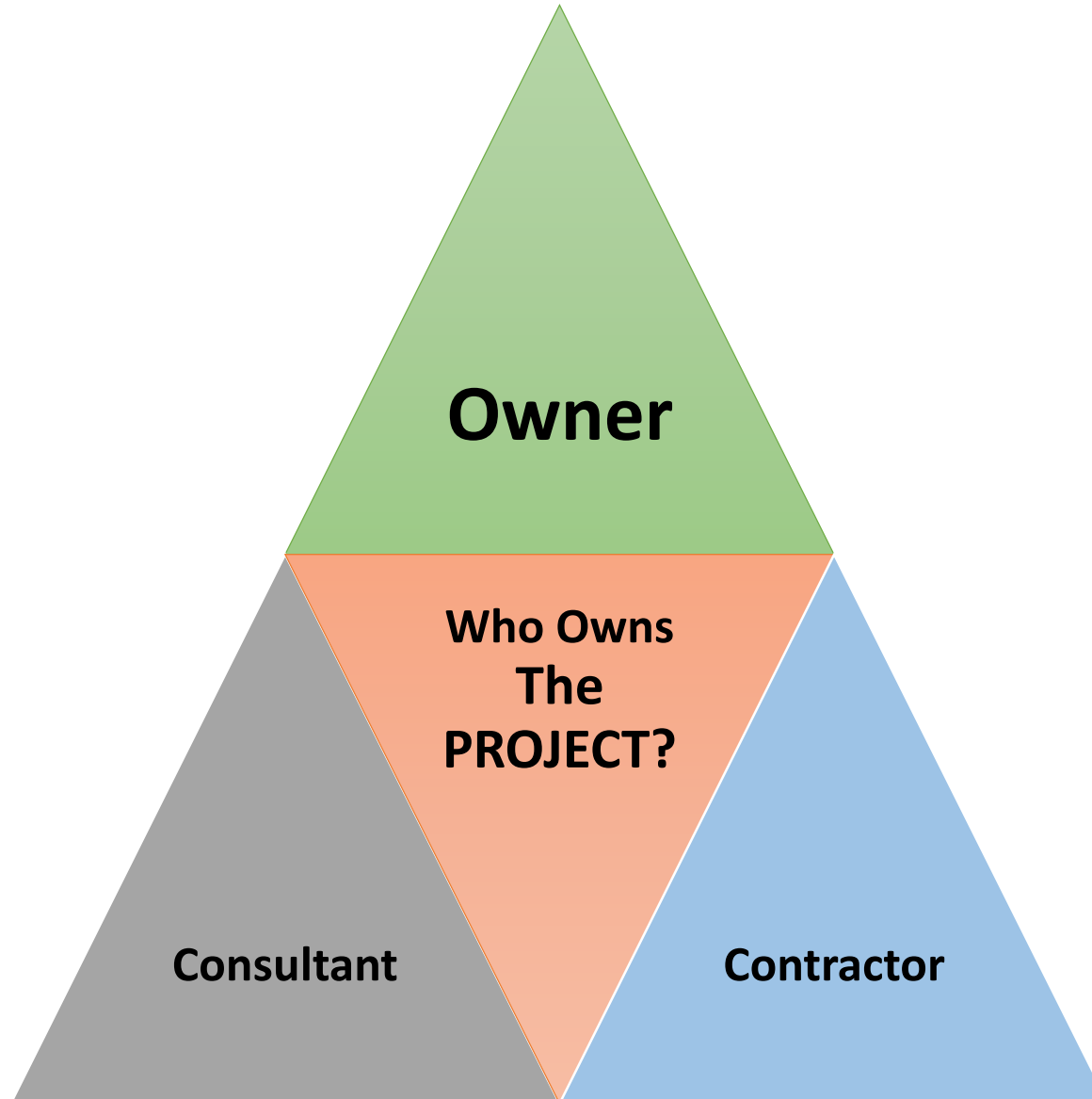
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# Which side you are on?



- Identification
- Dynamics
- Organisational Maturity
- Project Management Maturity
- Weakest link, Strongest Link
- Evolving the structure with strongest & weakest link in mind

## **Structured Project Management tips:**

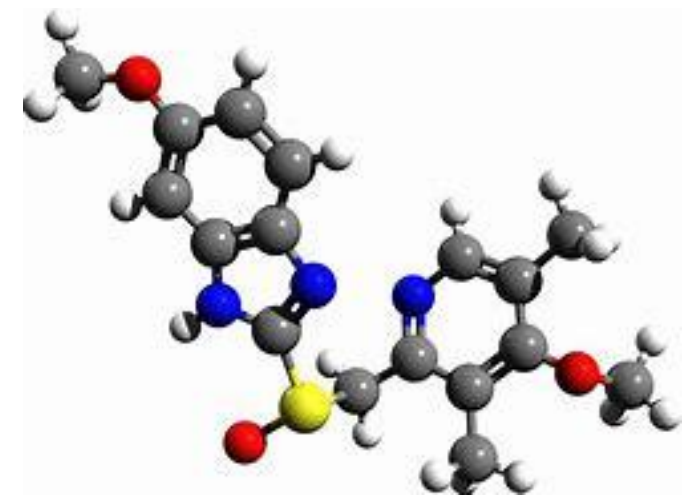
- Identify key stakeholders
- Conduct individual Kick offs
- Conduct Joint workshop & document thoroughly
- Define & control communication channels
- Use processes like WoW, EDMS etc.



- What is reality – Group decision or client / key vendor calling all the shots
- Paper structure
- Structure to impress leadership
- Stakeholders protecting &/or colluding with each other
- Dominance of single stakeholder (Including Client!)
- Hiring a stakeholder for a cause & not listening to their advise
- Internal teams competing with external stakeholders for knowledge or ability show-off

## **Structured Project Management tips:**

- Clearly deciding who will drive project among all (e.g. EPCM, PMC or Client)
- Clear baton points for entry & exit of stakeholders
- RACI up to document level
- All contracts aligned to above thought process
- Clear escalation matrix based on pre set criteria for technical issues as well



- Automation works well with large volume of accurate inputs
- These inputs come late in the project
- Then engineering is started in 2D and updated in parallel in 3D
- This leads to too many assumptions and hence errors
- We need to understand that project schedules with 2D and 3D look very different
- Project results, costs, timelines become unpredictable when 2D+3D combo is used

### **Structured Project Management tips:**

- Deciding upfront on type & extent of automation
- Involving leadership in related risks & selling them the risk
- Making realistic schedule allowing chosen combo to work
- Start engineering way early by disconnecting engineering commencement from project commencement (Stage Gate processes)
- Investment in 3D should be seen as life cycle cost investment & not just project TIC

## 3D

- Existing conditions models
  - Laser scanning
  - Ground Penetration Radar (GPR) conversions
- Safety & logistics models
- Animations, renderings, walkthroughs
- BIM driven prefabrication
- Laser accurate BIM driven field layout

## 4D

### SCHEDULING

- Project phasing simulations
- Lean scheduling
  - Last planner
  - Just In Time (JIT) equipment deliveries
  - Detailed simulation installation
- Visual validation for payment approval

## 5D

### ESTIMATING

- Real time conceptual modelling and cost planning (DProfiler)
- Quantity extraction to support detailed cost estimates
- Trade Verifications from fabrication models
  - Structural steel
  - Rebar
  - Mechanical/plumbing
  - Electrical
- Value engineering
  - What-if scenarios
  - Visualisations
  - Quality extractions
- Prefabrication solutions
  - Equipment rooms
  - MEP systems
  - Multi-trade prefabrication
  - Unique architectural and structural elements

## 6D

### SUSTAINABILITY

- Conceptual energy analysis via DProfiler
- Detailed energy analysis via Eco Tech
- Sustainable element tracking
- LEED tracking

## 7D

### FACILITY MANAGEMENT APPLICATIONS

- Life cycle BIM strategies
- BIM As-Builts
- BIM embedded O&M manuals
- COBie data population and extraction
- BIM maintenance plans and technical support
- BIM file hosting on Lend Lease's Digital Exchange System

- Over accomplish in contract – Face bureaucratic project execution
- Indecision on key issues – We will see it at the “END”
- Focussing entire bandwidth on engineering not realising that it is less than 10% of total cost
- Not realising adding too many “Stakeholder Wish lists” during engineering will result in high TIC
- Using contract to get “FREE REWORK” done without realisation that it is actually hurting the project

## **Structured Project Management tips:**

- Choose long term MSAs
- Create DEC's for OPEX needs with “Fixed-N-Flex” approach
- Focus on relationships & Contracts, but keep both separated
- Allow working level to follow contracts so that discipline is maintained
- Focus on savings in Procurement & construction costs and treat consulting firms as your partners
- Structured Apex meetings to sense & sort working level issues

- Release of deliverables with excessive assumptions & Hold areas
- Time is relative - Engineering is megabytes but construction is Concrete & steel – Choose carefully
- Shortcuts during engineering - Runaway overrun in latter phases
- Premature mobilizing of construction contractor can cause drain on wallet
- Not having your own “Home team” of Project Management can cause
- Fluid vendor list and process decision in perpetual flux causing too many iterations
- Adding last minute vendors during bidding stage

## Structured Project Management tips:

- Vendor list to be frozen by procurement cell
- Stage gate processes to be followed
- Basic & detailed Engg must be separated
- Realistic schedules to be discussed & agreed at KOM
- Decisions to be taken with Opex & Capex both costs





- I will give my decisions in instalments
- I will have second thoughts
- My one team member gets late in action
- It is not rocket science, lets assume
- As an experienced stakeholders you should have known
- But I want project error free, in budget & on time

## **Structured Project Management tips:**

- On ground deployed document control system (Not just checkbox system)
- Respecting time lines for decision
- Project manager on each side to handle his indecisive stakeholder
- Suspending project if there is major indecision for few weeks, saving money
- Bringing realism in culture though optimism is the buzzword

In-Use  
EDMS

HD Kick off  
meeting

Stage gate  
processes

PM, Design, O&M  
each is separate  
specialization

Stakeholder  
maturity  
“Matchmaking”

Design  
Automation is  
Pre-Decision

Free rework may  
not be free

Client risk is  
highest if project  
fails

Transparency is  
not negotiable

# Thank you

