



SPE Seminar on ‘Introduction to E&P Projects’, 21 November 2017, London

“Managing E&P Projects”

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'Managing E&P Projects' – Context & Agenda



1. Examples based mainly around **Project Management** of large offshore projects (the *Production* in E&P)
2. Why have Project Management (based on learnings of professional PM bodies)
3. Plan, Monitor & Control
4. Core Processes
5. Summary

1. Who are we - Upstream Advisors – A niche independent consultancy



Our Key Business Areas

Asset Transaction

- Due Diligence
- Asset Valuations
- Sales & Purchase Support

Asset Development

- Opportunity Realisation – Workflow to Perform Field Development
- **Project Management**
- Field Development Planning
- Commercial Services
- Audits & Peer Reviews
- Gas Master Planning

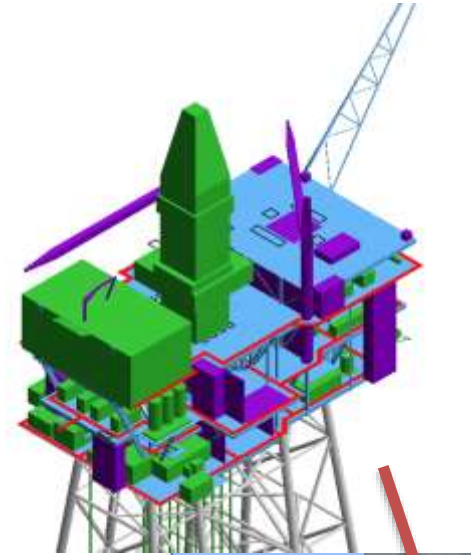
Business Consulting

- Business Process Improvement
- Change Management
- Corporate Strategy

We are a number of 'Advisors' who have worked in the Oil & Gas business for a number of years and have experience of doing projects for Operating Companies and Contracting Companies.

1. Offshore Developments – Fixed Platforms

depths of up to 200m, cost \$0.5m-2.0bn , take 4-5yrs;

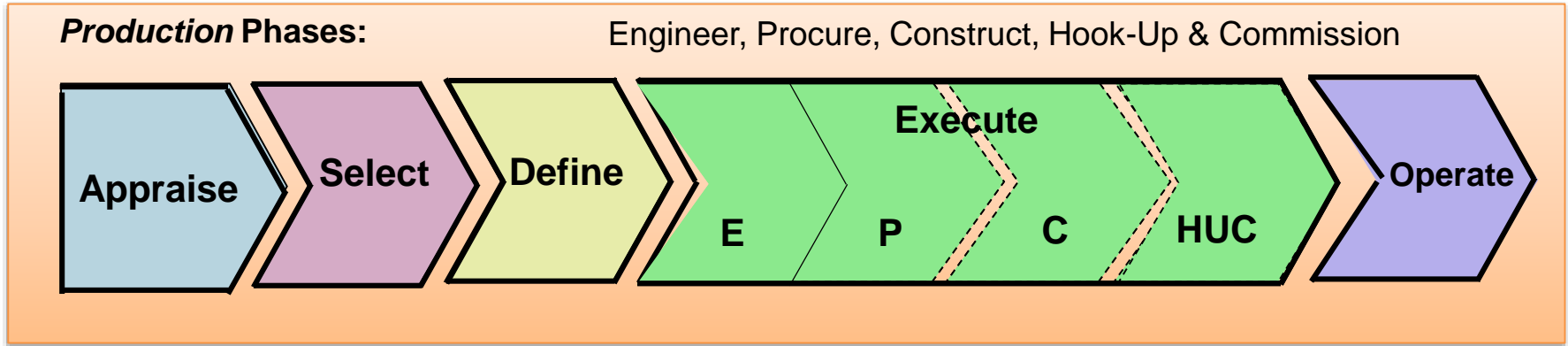


1. Offshore Developments – Floating Production

Water depths of up to 2000m, cost \$2-4 bn, take 4-5yrs.



1. Production Projects - Project Life Cycle



Concept Studies

Strategies / Form of Execution

Contract Strategy

Front End Engineering

Detailed design

Procurement

Construction

Asset Support

& Upgrade Projects

Project Management applies to all projects, all phases

2. Why Have Project Management?

Traditionally / historically:

‘We have been doing projects for thousands of years (historical and anecdotal evidence), so what is new about it?’



Engineers say: ‘Project Management is just common sense!’

Project Managers say: ‘I've been managing projects for X years. I do not need any fancy practices and processes. Just trust me!’

With the result of projects having: cost over runs, schedule delays (delayed production) & not performing as expected.

2. Project Management Bodies



- Creation of Professional Bodies for Project Management
- Best practices embodied in their 'Bodies of Knowledge' (BoK's)
- Defined competency framework

- US – Project Management Institute, PMI



- UK – Association for Project Management, APM



- European – International Project Management Association, IPMA



2. Project Management Definitions

“Project management is the process by which projects are defined planned, monitored, controlled and delivered such that the agreed benefits are realised Projects bring about change and project management is recognised as the most efficient way of managing such change.”

- *APM BoK* ©

“Project management is the application of knowledge, skills, tools and techniques to project activities to meet project requirements. Project management is accomplished through the application and integration of project management processes of initiating, planning, executing, monitoring & controlling and closing.”

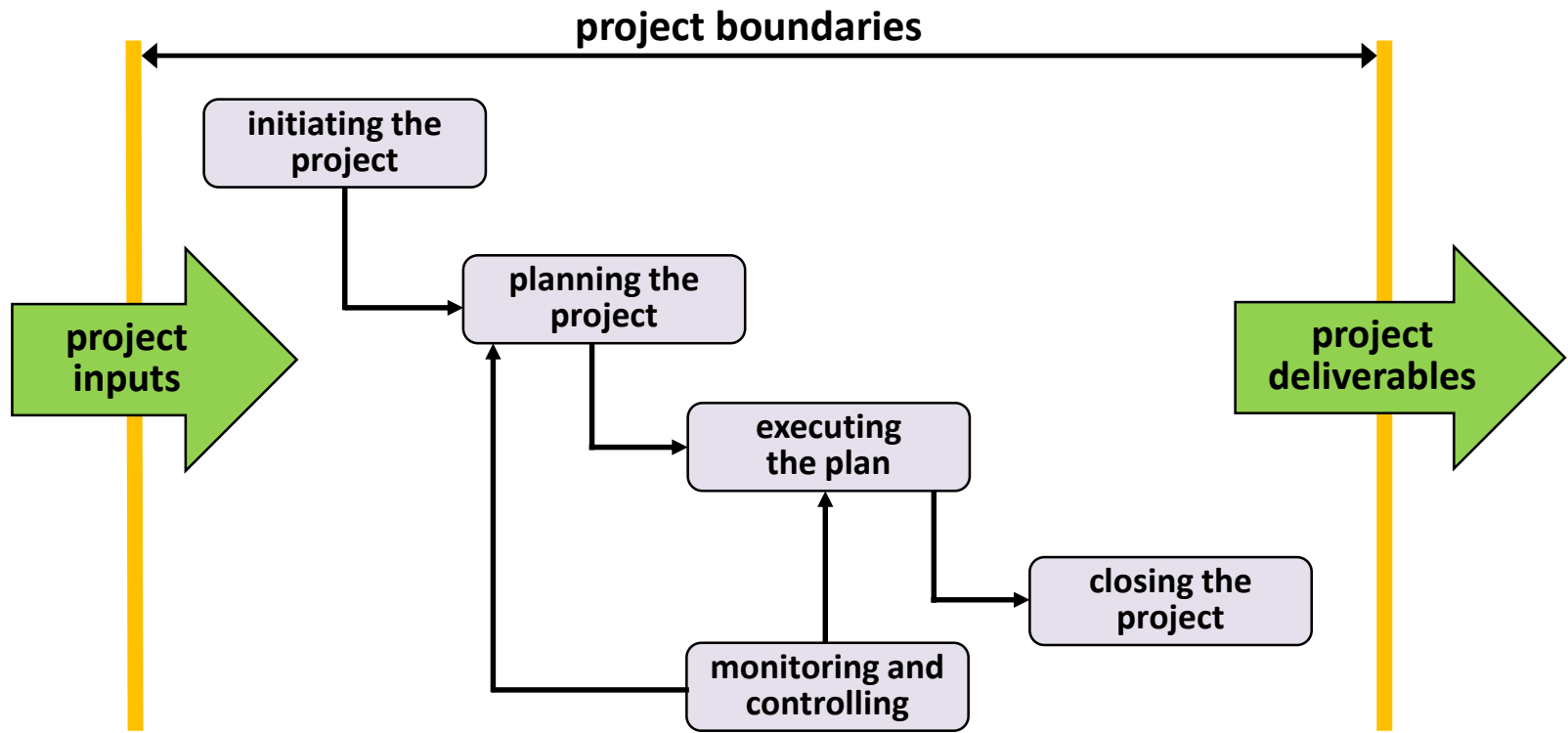
- *PM BoK* ©

Key words out of both: “plan, monitor, control”

3. Why Plan, Monitor and Control?

- To 'plan' means you have to define (& quantify) the What, How, When
- To 'monitor' means to know where you are against the Plan at any given point in time:
 - what have you achieved?
 - how much you spent (or resources used) in getting there?
 - how efficient and effective were you at getting there?
 - what remains to be done?
 - to forecast what the completion duration and final cost will be
- To 'control' means you have the knowledge, the data to:
 - to guide, to intervene, to redress any shortfalls or slippage (before it's too late)
 - to provide feedback to all your stakeholders

3. Plan, Monitor & Control



3. Core Project Management Processes

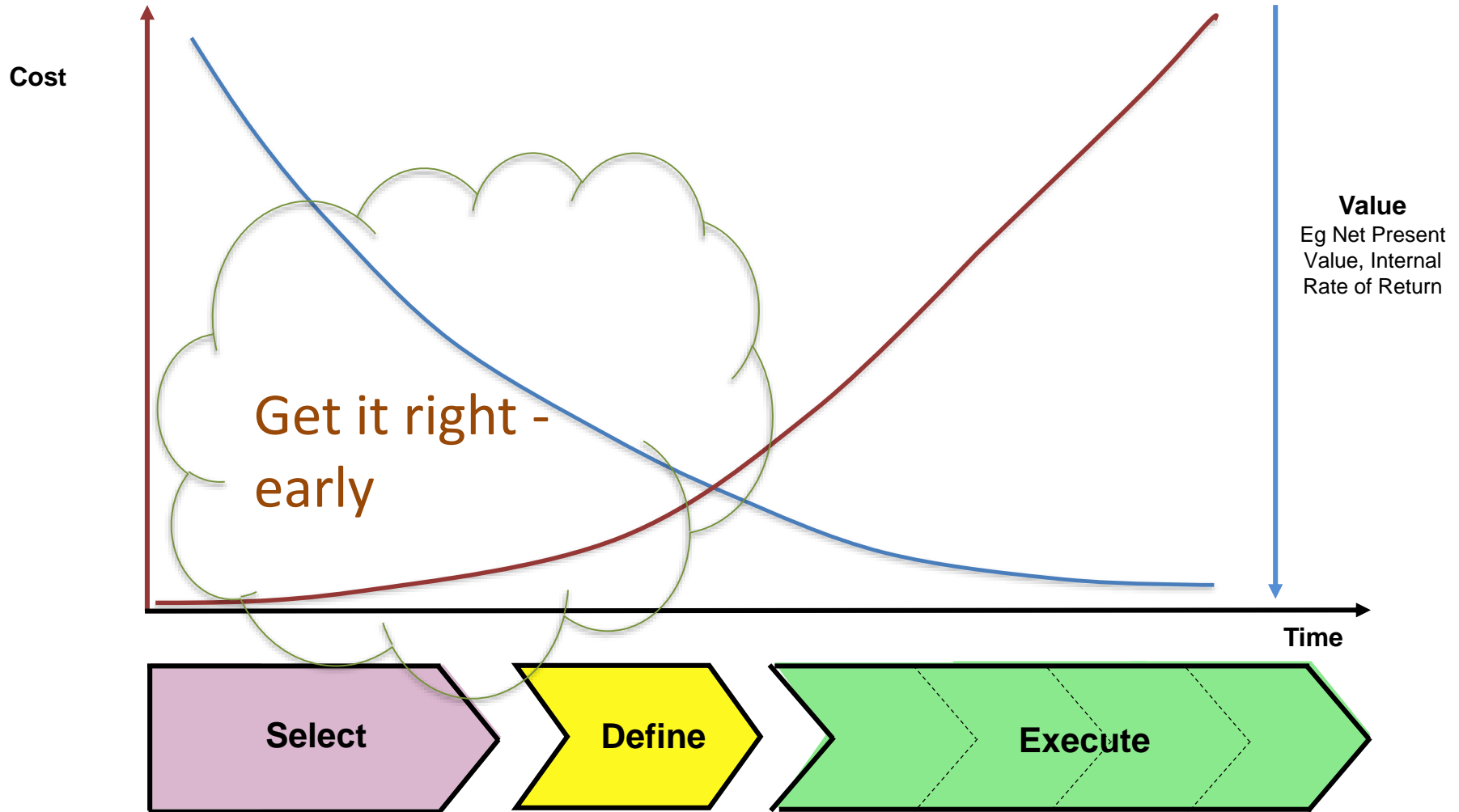


The Professional Bodies defined core process, eg:

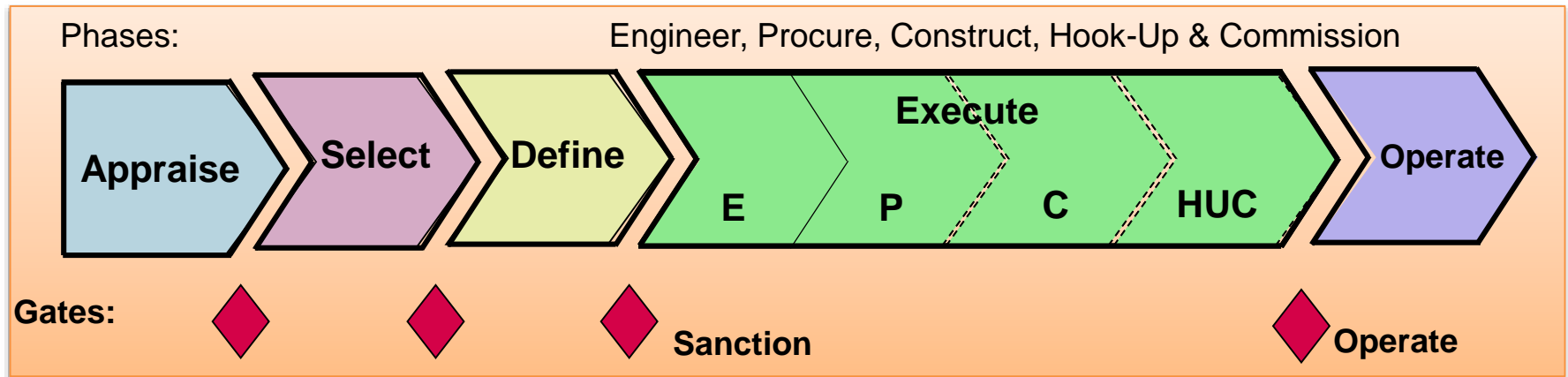
- **Scope Management**
- **Change Management**
- **Performance Management**
- **Stakeholder Management**
- **Risk Management**
- Supply Chain/ Procurement Management
- Quality Management
- Health Safety Environmental Management
- Information Management
- & others

Each of these aspects needs to be planned, monitored & controlled

4. Core Processes - Scope Management - Plan



4. Core Processes - Scope Management – Monitor & Control



Each Gate will have required levels of satisfaction

- can't proceed unless the criteria is met & approval given

After Sanction the 'Control' continues in the form of a Change Management process.

4. Core Processes - Change Management

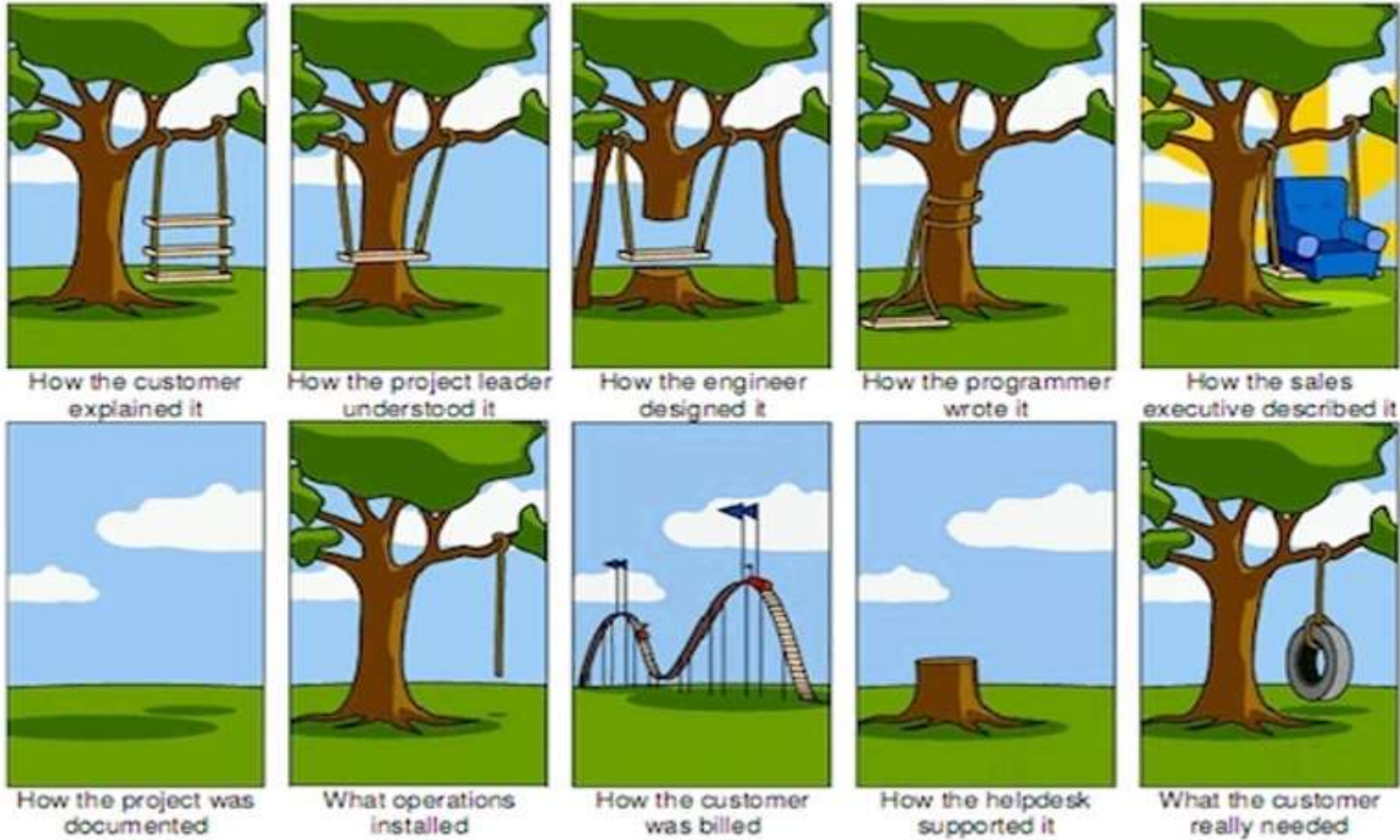
Change happens for many reasons and in many forms

- external – client, stakeholders, new regulations, changing environment, market changes, innovation
- internal – project team, materialising risks, inefficiencies, surprises (!), scope development, value adding ideas, performance slippage, poor initial scoping



- An organised systematic approach is needed to manage the positive or negative effects of the change on the project baseline objectives of cost, time and quality.
- Un-managed and ‘creeping’ changes usually cause havoc at the latter stages of a project. Often the cause of the major disputes between client and supplier.
- Documenting change is an important aspect of scope and configuration control, as well as being good commercial practice.

4. Core Processes - Performance Management



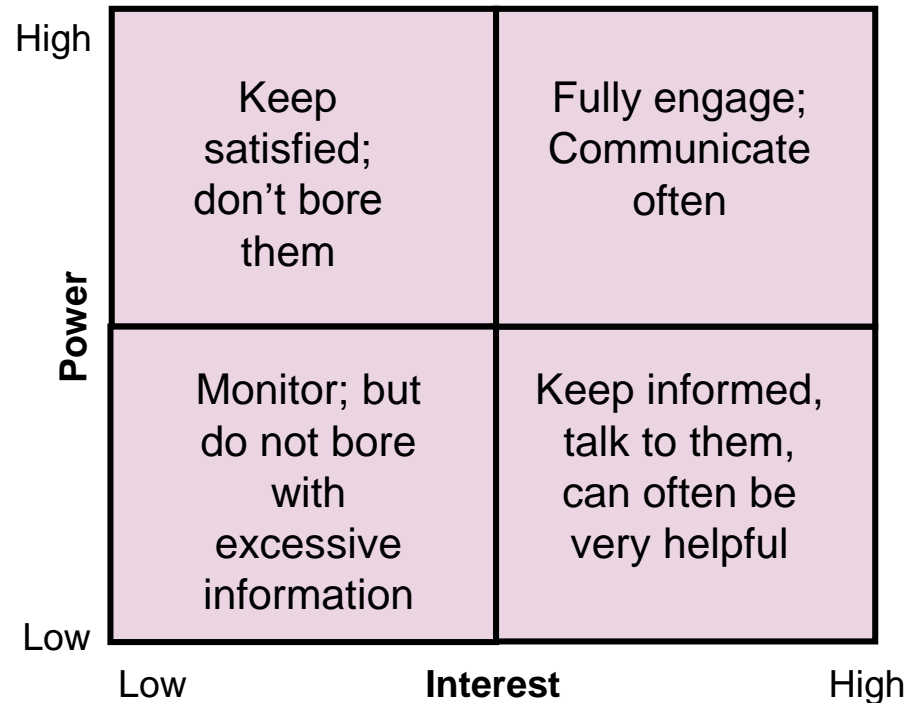
4. Core Processes - Stakeholder Management



Stakeholders – *anyone with an interest in the project*

Develop a Stakeholder Management Plan

- Identify stakeholders
- Prioritise stakeholders
- Communicate to get their opinions early and to gain their support
- Gain trust and understanding
- Requires continuous dialogue



4. Core Processes - Risk Management

Risk is :

- “An ***uncertain*** event, feature, activity, or situation that can have a **positive** or a **negative** effect on objectives”
- ***Risk = opportunities + threats***



Risk management is :

- “A formal process that enables identification, assessment, planning and **management** of risks”

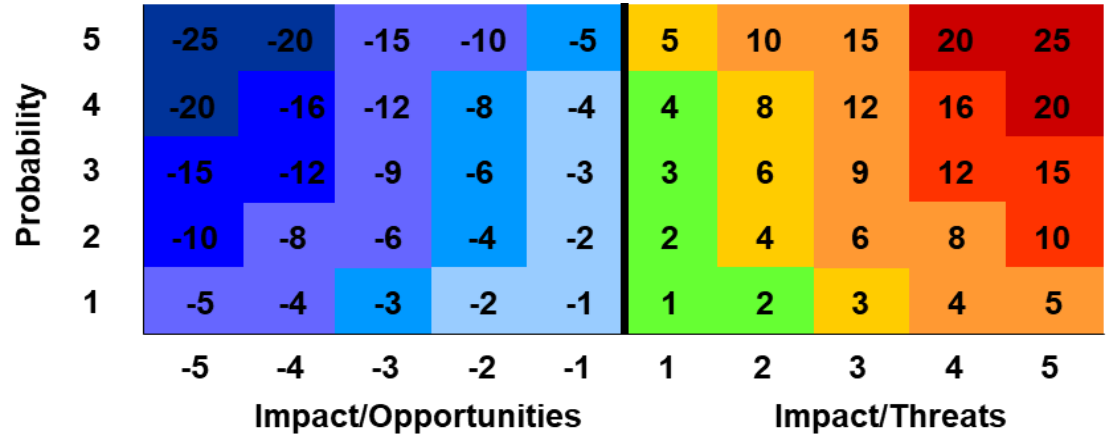
Develop a Risk Management Plan (defining how you are going to manage risk)

- ***Define all risks***
 - ***Rank them***
 - ***Create actions (& Owners)***
-

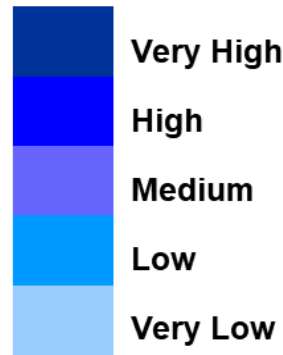
4. Core Processes – Risk Management

Quantifying Risks

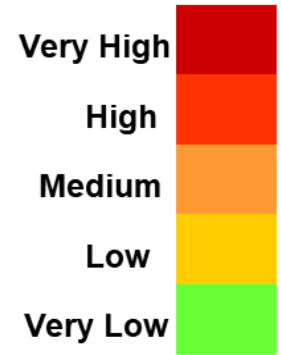
- $P \times I$
- Qualitative or Quantitative techniques



Opportunities



Threats



Risks are mitigated or realised by taking action (effort, resources), not by ambitious words alone!

5. Summary

Characteristics of good Project Management

- An educated approach
- A structured approach
- Assists in ensuring the ‘right’ project is being executed
- Assists in ‘planning’ the project
- Oversees the execution of the project
- Provides input, guidance, correction
- Manages not only the Customer but all involved
- Endeavours to ensure the project output is what was expected



Any Questions?



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