

An Introduction To Intelligent Project Management

“The Intelligent Project Management Wheel”



Jose Luis Ortiz Volcan

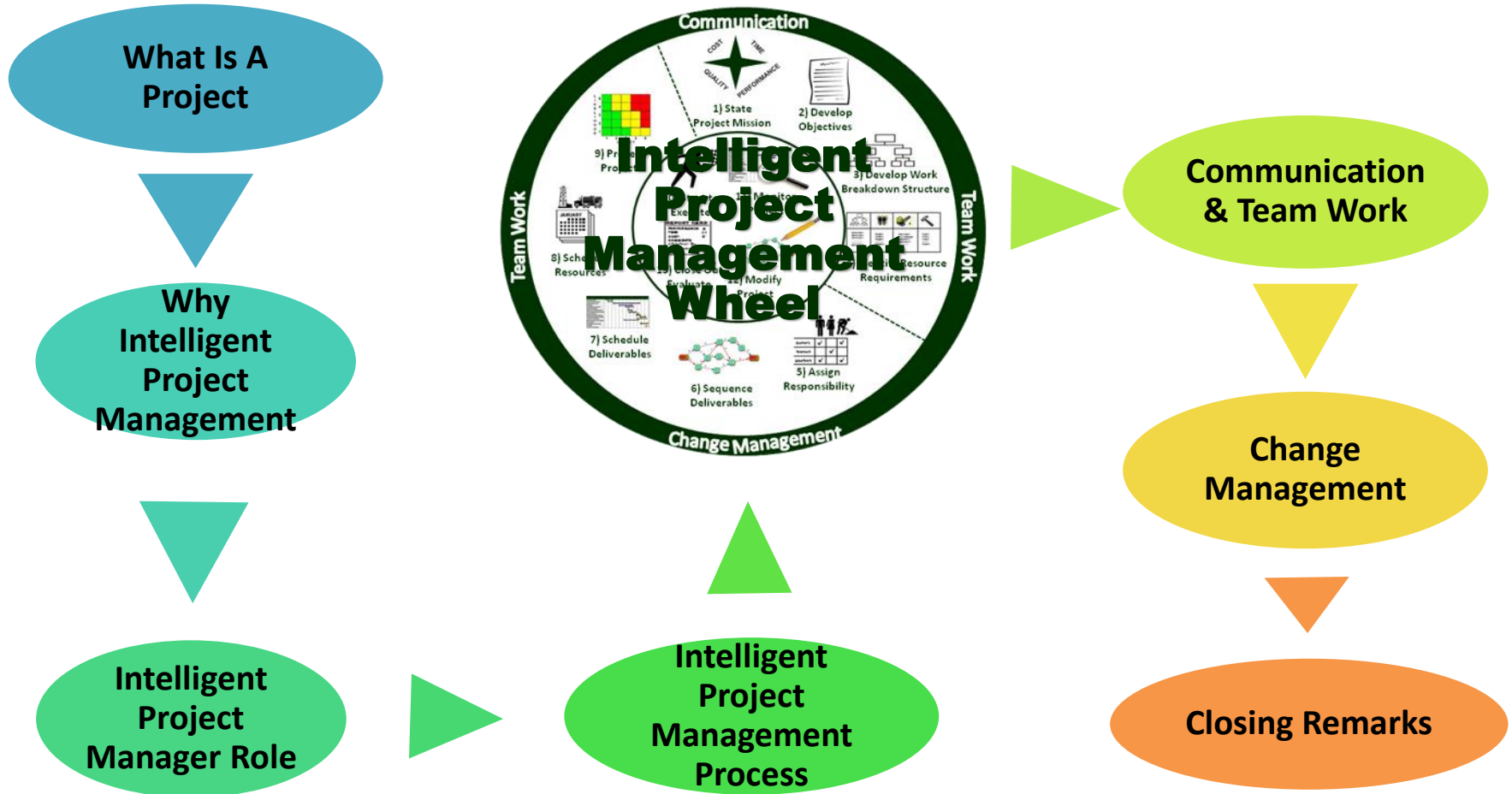
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An Introduction To Intelligent Project Management

Intelligent Project Management 101

Road Map

Highly Interactive - To Navigate Click On The Subject



What Is A Project?

- *Project Management Institute (PMI) is one of the pioneers and a recognized worldwide organization focused on the improvement of project management.*
- *PMI publishes the Project Management Institute Body of Knowledge (PMBOK®) which is a collection of processes and knowledge areas accepted as best practices.*
- *PMBOK® defines a project as “...a temporary unique endeavor done for a particular purpose to fulfill a business need ” - Temporary means that every project has a definite beginning and a definite end - Unique means that the product or service is different in some distinguishing way from all other projects or services.*

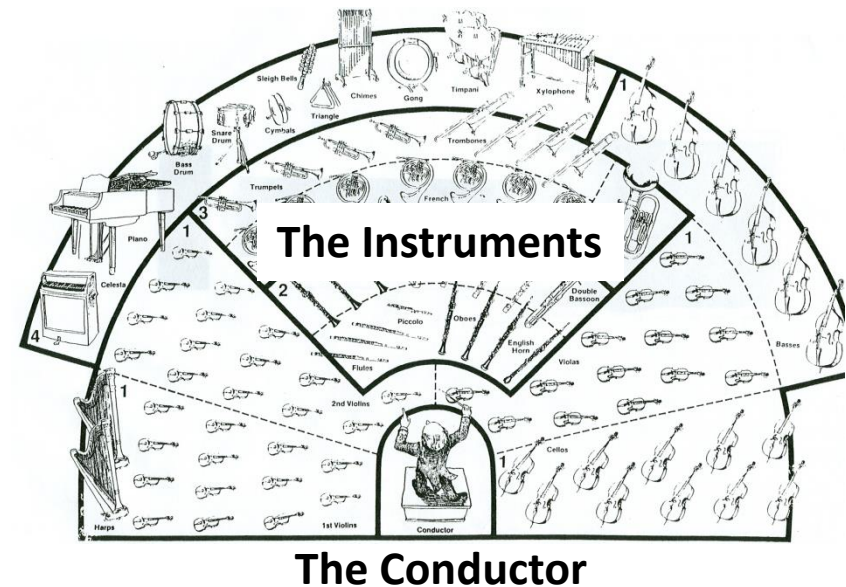
Why Intelligent Project Management?

- *The success of a business plan in any industry relies on the efficient execution of projects associated with resources or assets undergoing different stages of the life cycle. Most typical projects are related to the creation of new assets and integration with existing system of assets, value chain or supply chain.*
- *Having the big picture with the systemic relationships among the projects or subprojects becomes a key planning tool to decide where to allocate limited available resources in a reliable manner that will maximize value creation.*

Intelligent Project Manager Role – Part 1 of 3

The Orchestra Metaphor

The conductor (Maestro) of an orchestra is an appropriate metaphor for being an intelligent project manager because, in the same way that a conductor integrates the unique sounds of different instruments into a coherent piece of music, a project manager integrates the talents and contributions of different specialists to complete the project.



Intelligent Project Manager Role – Part 2 of 3

The Orchestra Metaphor

Like conductors of an orchestra, project managers bring together all of the varying personalities and disciplines needed to make the project successful and when it works, beautiful music is the result. Similarly, when it goes wrong a cacophony ensues.

Great project managers make the delicate balance of running a project look easy, resulting in people thinking that anyone can do it.

*“The Maestro’s baton makes no sound, but it creates the exact space in which sound can exist, and can become meaningful”
- Itay Talgam (Conductor, Facilitator)*

Intelligent Project Manager Role – Part 3 of 3

The Intelligent Project Manager is the person with the responsibility and authority to deliver project results. The Intelligent Project Manager concentrates and streamlines management responsibility. The Intelligent project manager:

- Applies a project management process
- Uses appropriate methods to plan and communicate
- Involves others to gain needed commitment and information
- Guides problem solving and decision making
- Creates the necessary temporary performance environment

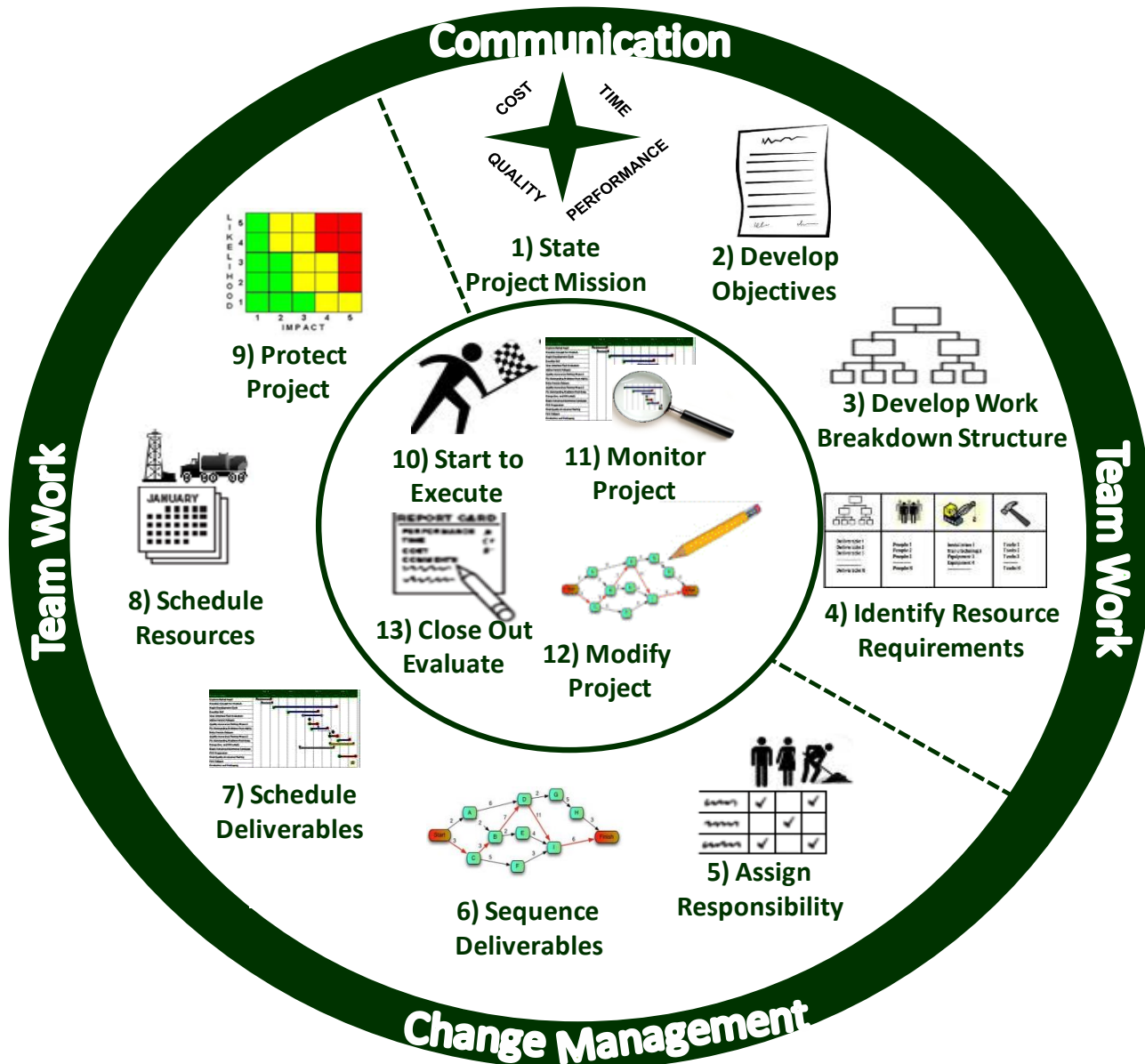
Intelligent Project Management Process – Part 1 of 2

- *PMBOK® organizes project management into 44 processes which are classified into 5 process groups consisting of: 1) initiating, 2) planning, 3) executing, 4) monitoring and controlling and 5) closing.*
- *Within each of the 5 process groups are: inputs (documents to be acted on), tools and techniques (that converts inputs to outputs), and outputs (documents that result from the process).*
- *PMBOK® further organizes the 44 processes into 9 management knowledge areas: 1) integration, 2) scope, 3) time, 4) cost, 5) quality, 6) human resource, 7) communications, 8) risk and 9) procurement.*

Intelligent Project Management Process – Part 2 of 2

- *Each company defines its own project management process preferably aligned with PMBOK®.*
- *In this introductory document a simplified approach called “The Intelligent Project Management Wheel” is presented with five groups of processes : - **Definition** - **Planning** - **Execution** and - **Communication & Team Work and Change Management.***
- *This simplified approach has been successfully used in many oil and gas projects.*

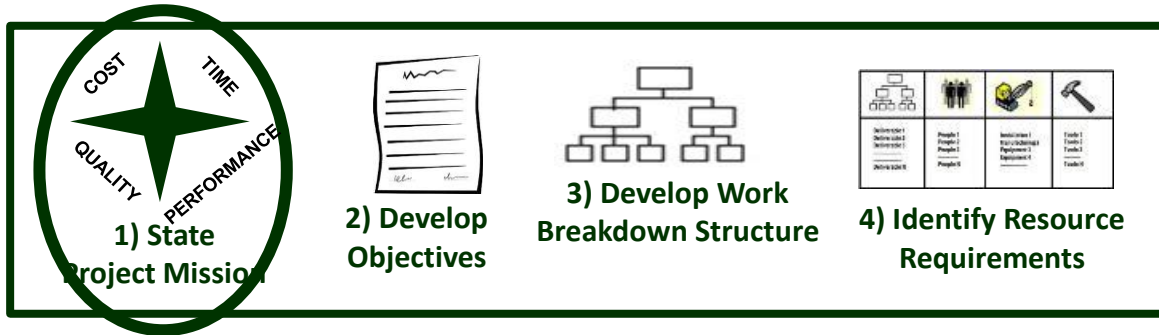
The Intelligent Project Management Wheel



To Navigate In The Intelligent Project Wheel Click On Any Subject

Intelligent Project Management Wheel – Step 1

1) State Project Mission



Establishing the project boundaries ***To help define, plan, and control the project.***
 Appraise project background, likely constraints, priority, and worth
 Decide on a short statement: Action and end result (performance) ,Time and Cost

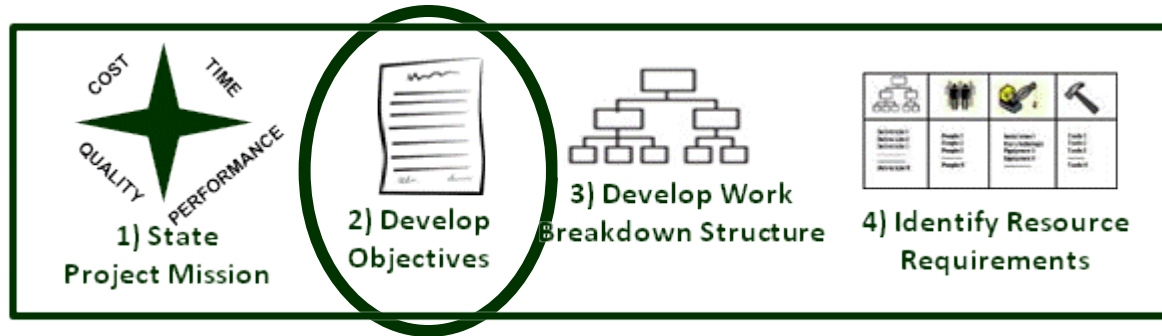
Questions

- What is the action and end result and What evidence suggests a need for it?
- Are we capable of doing this project?
- How long does a project like this take?
- How much does a project like this cost?



Intelligent Project Management Wheel – Step 2

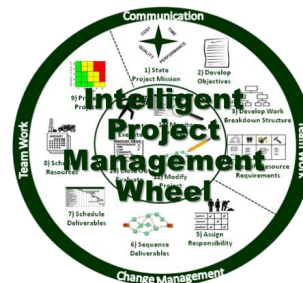
2) Develop Objectives



Describing results and constraints to be considered throughout the project *To guide project work and decisions*

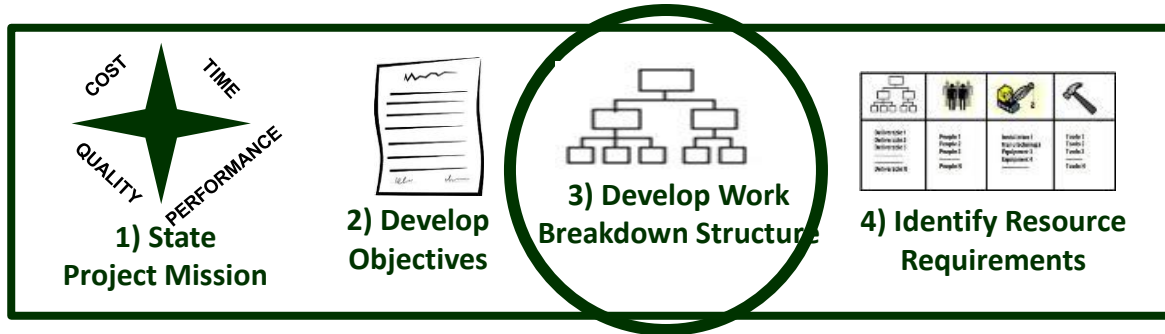
Questions

- What value should this project produce?
- What short- and long-term benefits do we want?
- What constraints do we face?
- What requirements must be met?
- How will we know when we satisfy each objective? (measure and standard)



Intelligent Project Management Wheel – Step 3

3) Develop Work Breakdown Structure



Documenting how work will be organized. To act as basis for costing, planning, monitoring, and control. This is known as work breakdown structure (WBS).

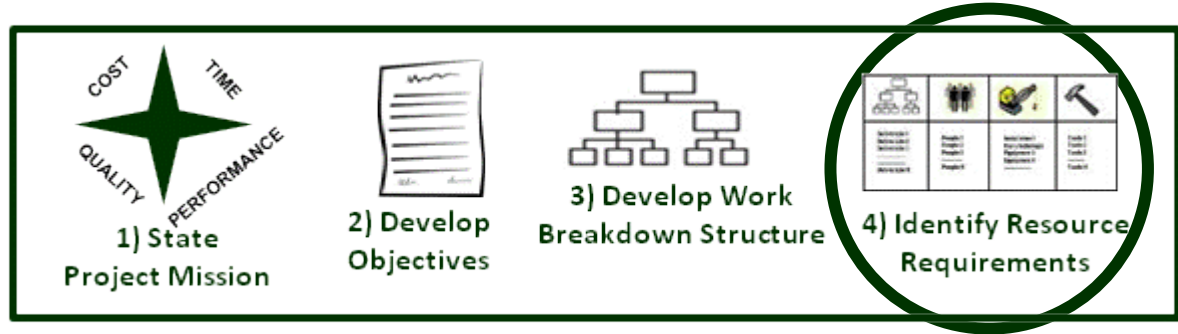
Questions

- Will work meet all project objectives?
- Are all work packages necessary and sufficient to produce major deliverables?
- Can resources, responsibility, schedule, and sequence be determined for all work packages?
- Have we identified all appropriate subprojects?
- Can we monitor and control work described in this plan?



Intelligent Project Management Wheel – Step 4

4) Identify Resource Requirements



Estimating resources needed to produce each work package
To avoid future resource problems and help assign responsibility

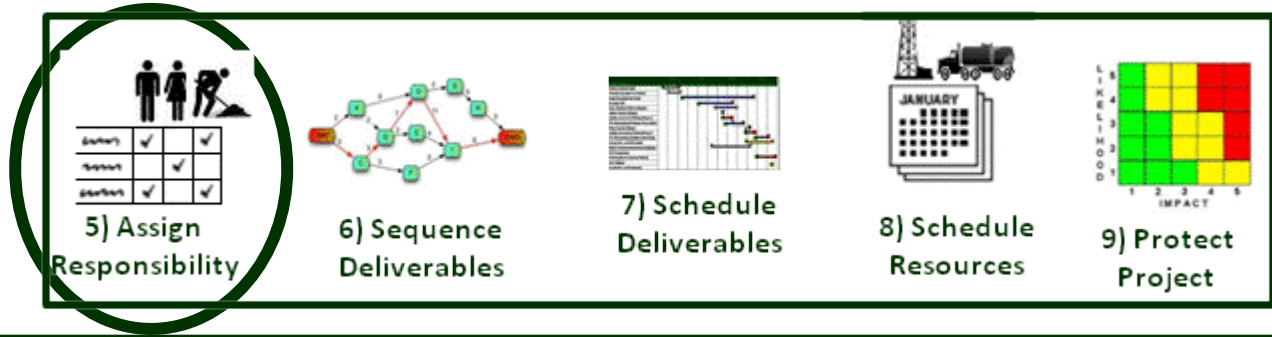
Questions

- What knowledge and skills are needed?
- What facilities are needed?
- What equipment is required?
- What supplies or materials will be used?
- What special or unusual resources are needed?



Intelligent Project Management Wheel – Step 5

5) Assign Responsibility



Identifying people responsible for completing each work package To know who will do what. A RACI matrix is used. RACI accounts for the four roles: Responsibility, Accountability, Consulted and Informed.

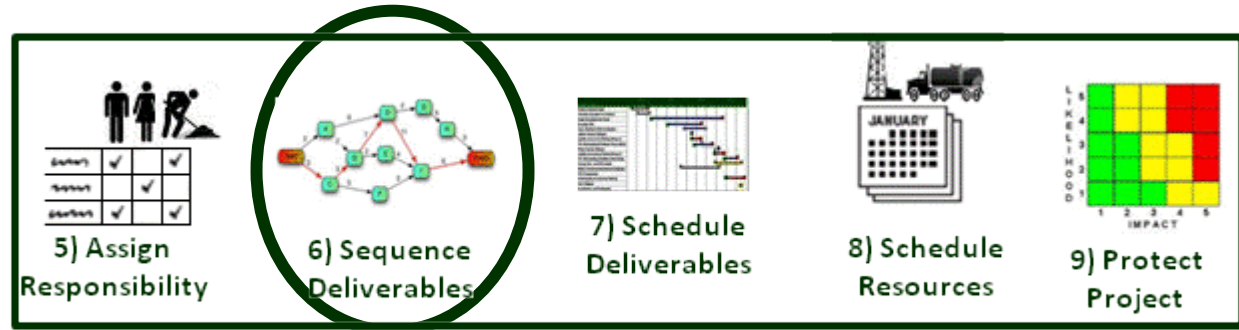
Questions

- Who has resources for this work package?
- Who has knowledge, skills, and experience?
- Whose commitment is needed?
- Who is responsible, accountable, consulted and informed?



Intelligent Project Management Wheel – Step 6

6) Sequence Deliverables



Identifying the order in which deliverables should be produced *To help schedule work efficiently*. Determine precedence and duration for each work package. Develop precedence list and/or network diagram. Identify the critical path.

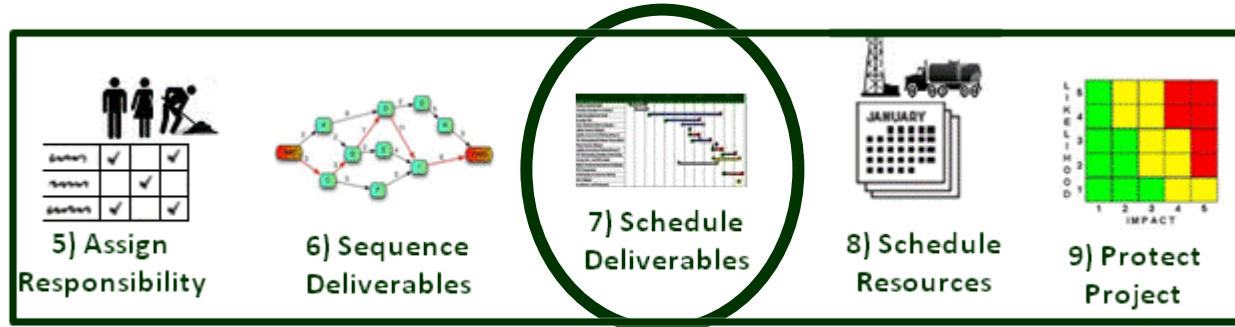
Questions

- In what order must work packages be completed?
- What knowledge, experience, templates, or historical information exists?
- How much elapsed time will each work package take given the type and availability of resources?



Intelligent Project Management Wheel – Step 7

7) Schedule Deliverables



Identifying specific dates when work packages will be performed ***To provide a schedule baseline for monitoring.*** Prepare a Gantt Chart to help communicate the project schedule and provide a tool for monitoring.

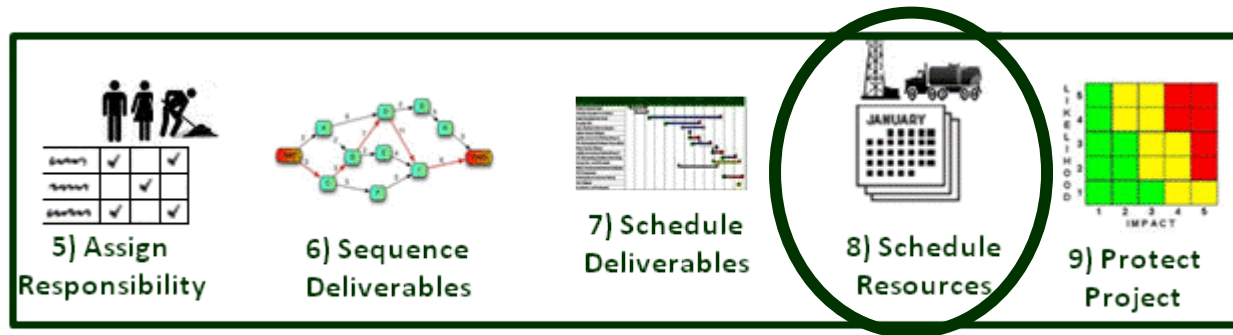
Questions

- What assumptions are being made about working time, resource availability, or other constrain?
- When should work packages start and finish in calendar time?



Intelligent Project Management Wheel – Step 8

8) Schedule Resources



Confirming resources will be available when required To deploy resources effectively and maintain their commitment.

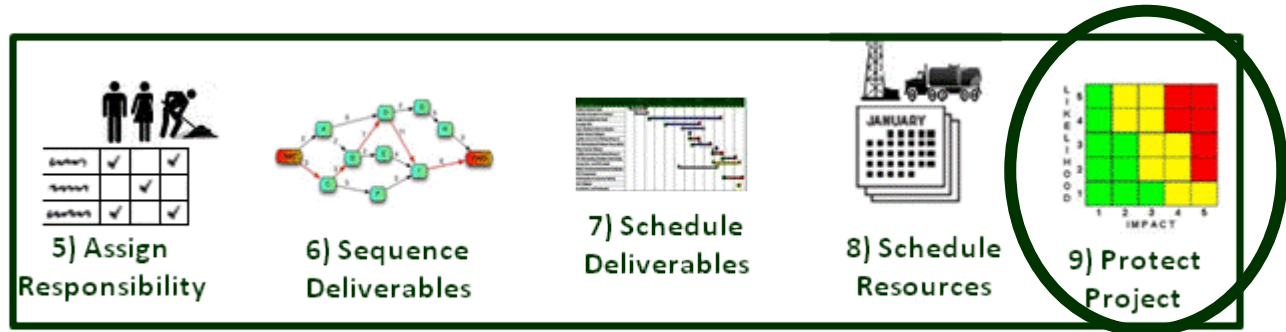
Questions

- In what order must work packages be completed?
- What knowledge, experience, templates, or historical information exists?
- How much elapsed time will each work package take given the type and availability of resources?



Intelligent Project Management Wheel – Step 9

9) Protect The Plan



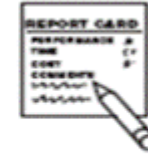
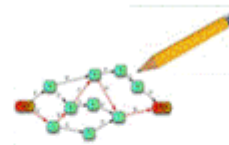
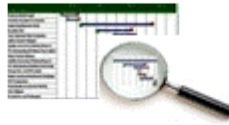
Planning actions to reduce risk and to capitalize on opportunities that may arise during the project To help ensure that project objectives are met or exceeded. A RAM (Risk Assignment Matrix) is prepared to integrate all risks.

- Identify areas of the plan where threats or opportunities are anticipated
- Conduct a Potential Problem (or Opportunity) Analysis
- Add actions to the plan that will reduce the risk or enhance the benefit to an acceptable level
- Adjust the project plan to reflect the results of the analysis



Intelligent Project Management Wheel – Step 10

10) Start To Execute



Confirming readiness and initiating project work *To avoid common start-up problems*

Questions

- What should be reported to the project manager and how often?
- How will concerns be reported?
- How and when will the project team record time and expenses?

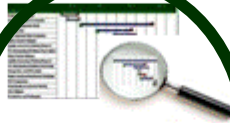


Intelligent Project Management Wheel – Step 11

11) Monitor Project Part 1 of 2



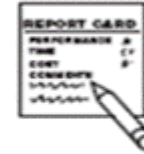
10) Start to Execute



11) Monitor Project



12) Modify Project



13) Close Out Evaluate

Comparing actual project performance to the plan *To make progress visible, assess variances, and apply correct control*

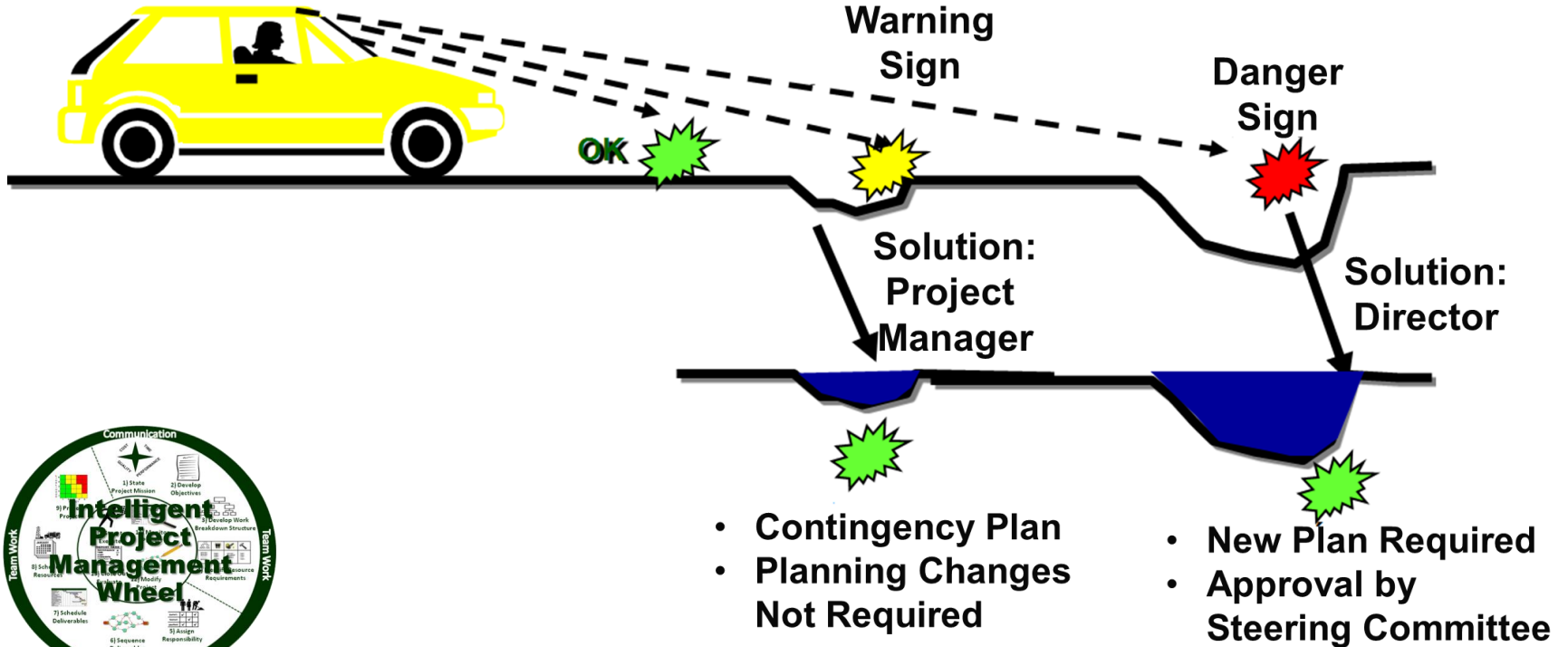
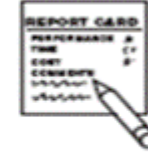
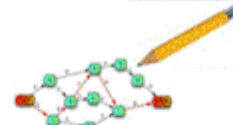
Questions

- How does the schedule compare to the plans?
- How do costs compare to the budget?
- How do available resources compare to the plan?
- How do preliminary results compare to expectations?



Intelligent Project Management Wheel – Step 11

11) Monitor Project Part 2 of 2

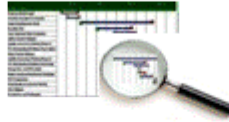


Intelligent Project Management Wheel – Step 12

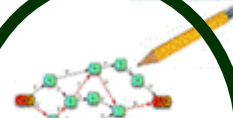
12) Modify Project



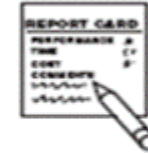
10) Start to Execute



11) Monitor Project



12) Modify Project



13) Close Out Evaluate

Revising the plan to respond to new threats and opportunities *To ensure the business objectives are in fact, met*

- Identify which work packages are affected
- Locate the earliest time in the process when each concern has impact
- Use definition and planning steps to revise and to change the plan
- Control and communicate changes

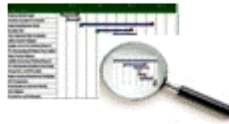


Intelligent Project Management Wheel – Step 13

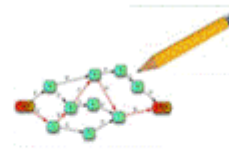
13) Close Out Evaluate



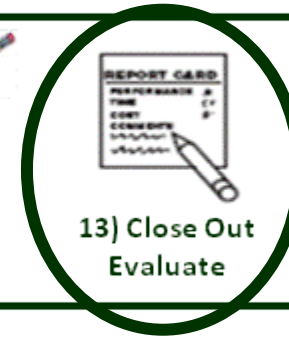
10) Start to Execute



11) Monitor Project



12) Modify Project



13) Close Out Evaluate

Shutting down, reviewing, and learning from the project *To understand the project's success and share lessons learned*

- Include closeout activities in the work breakdown structure
- Review lessons against objectives
- Review lessons learned
- Bring closure to the project team
- Document a project summary
- Communicate project completion



Intelligent Project Management Wheel

Communication & Team Work – Part 1 of 2



Information shared among the project manager and others *To clarify or resolve issues, to set expectations or give feedback and to help the team work together*

- Gather, clarify and confirm information using the right questions
- Manage the performance system to provide feedback
- Managing involvement and participation
- Meeting management (prepare, conduct and follow up)

Intelligent Project Management Wheel

Communication & Team Work – Part 2 of 2



The project communication process include the following:

- **Communications Planning** - determining the information and communications needs of the stakeholders: who are they, what is their level of interest and influence on the project, who needs what information, when they will need it and how it will be given to them.
- **Information Distribution** - making needed information available to project stakeholders in a timely manner.
- **Performance Reporting** - collecting and disseminating performance information. This includes status reporting, progress measurement and forecasting.
- **Manage Stakeholders** - managing communications to satisfy the needs of and resolve issues with project stakeholders.

Project Management Wheel

Change Management



When project management is implemented, it brings change to the asset organization.

The leadership who is committed to the business, will manage this change by:

- ***Sharing a Vision:*** *Without a shared vision there is confusion and regression.*
- ***Having An Action Plan:*** *Without an action plan there can be a false initiation.*
- ***Providing Technologies & Resources:*** *Without technologies and resources there is anxiety and delay.*
- ***Applying Processes and Procedures:*** *Without processes and procedures there is lack of accountability and frustration.*
- ***Using A Value-Added Measurement System:*** *Without a value-added measurement system there is lack of motivation and the organization get stuck.*

*Finally, without **alignment** there is rejection, and nothing changes.*

Closing Remarks

- *This is the first of three modules designed to help implement intelligent project management in your organization. This is the introductory level. Two more modules are available: intermediate/advance and management-executive.*
- *The content presented in this document is used as support for an interactive 3 hours seminar or one day practical on the job workshop using data provided by attendees from actual assets.*