

Guten Tag

(good day)

Project Management Process Groups

Initiating

Planning

Executing

Monitoring &
Controlling

Closing

Project
4. Integration
Management

5. Scope

6. Time

7. Cost

8. Quality

9. Human Resources

10. Communications

11. Risk

12. Procurement

13. Stakeholder

13.1

13.2

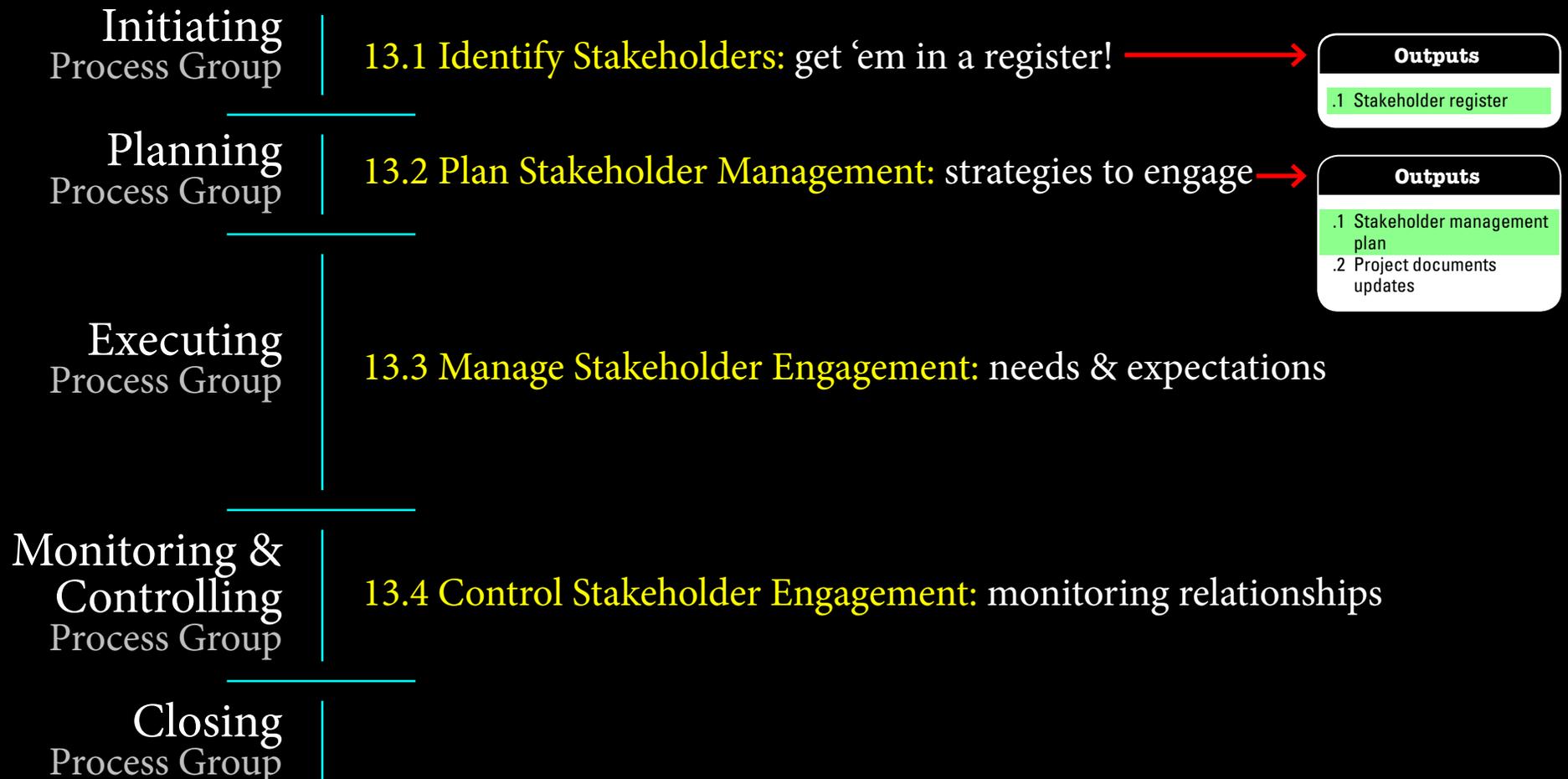
13.3

13.4

Knowledge Areas

Project Stakeholder Management

Project Stakeholder Management



13.3 Manage Stakeholder Engagement



What & Why?

To be proactive

To make sure stakeholders understand the goals, objectives, benefits and risks of the project

To increase support and minimize resistance from stakeholder

Meet stakeholder needs & expectations

Address issues as they occur

Note - Stakeholder influence over a project is highest during the initial stages of a project and lowers as it progresses

13.3 Manage Stakeholder Engagement



Stakeholder Management Plan (13.2): describes how best to involve stakeholders in a project

Communications Management Plan (10.1) can include:

Stakeholder **communication requirements** including language, format, content and the level of detail

Reasons for distributing information

The **escalation process**

13.3 Manage Stakeholder Engagement



Communication Methods (10.1): are identified for each stakeholder in the communications management plan

Interpersonal Skills:

Building trust

Resolving conflict

Active listening

13.3 Manage Stakeholder Engagement



Management Skills:

To **coordinate and harmonize** the team & stakeholders

Facilitate **consensus** toward project objectives

Influence people to support the project

Negotiate agreements to satisfy the project needs

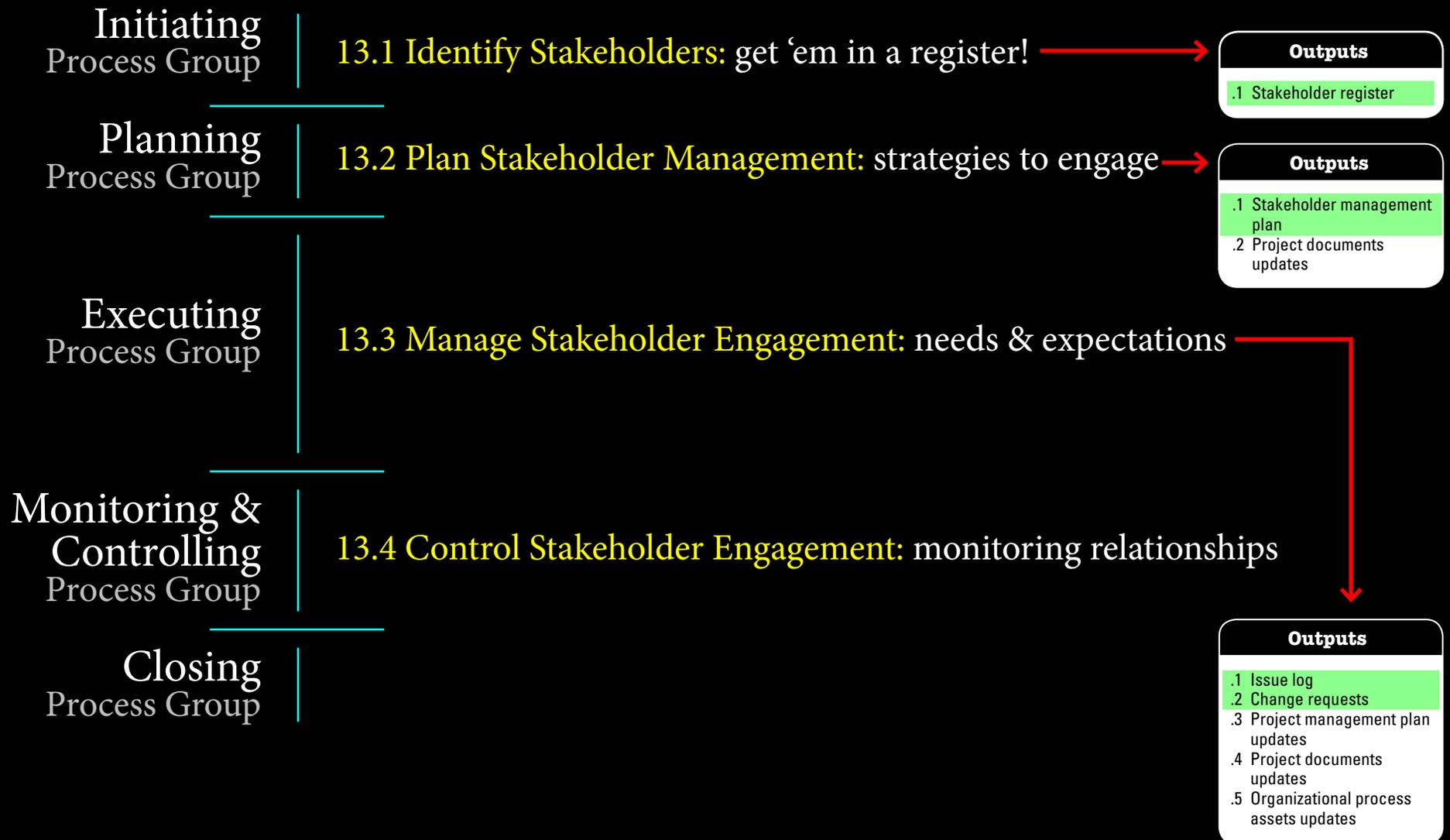
13.3 Manage Stakeholder Engagement



Issue Log: the document used to **document and monitor** elements under discussion or in dispute between project stakeholders

Change Requests: A **formal** proposal to modify any document, deliverable or baseline

Project Stakeholder Management



Monitoring & Controlling Process Group

Process Interaction

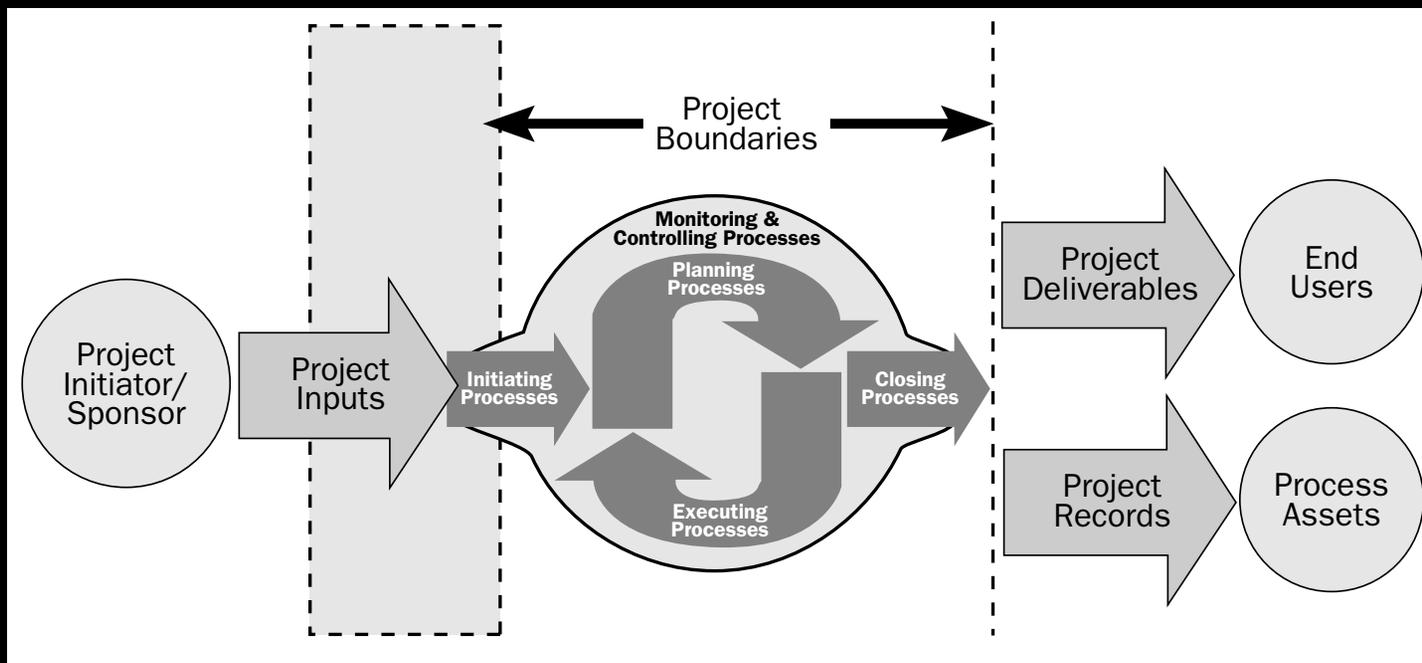
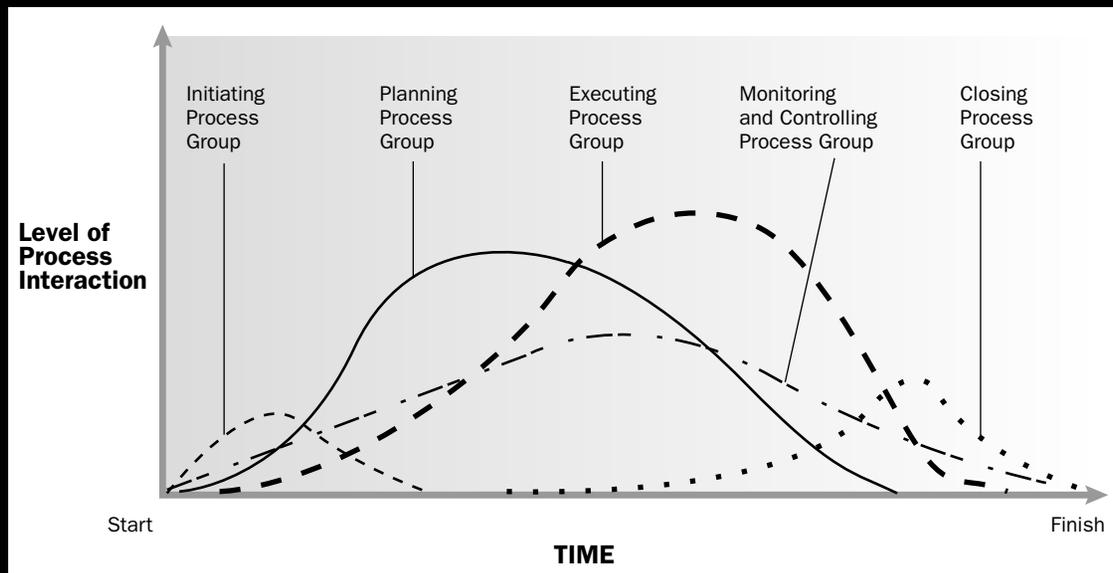


Figure 3-4. Project Boundaries

The “check & act” step of the process

For the PMP exam assume that your projects are plan driven

Monitoring & Controlling Process Group

4.4 Monitor & Control Project Work:

4.5 Perform Integrated Change Control:

5.5 Validate Scope:

5.6 Control Scope:

6.7 Control Schedule:

7.4 Control Costs:

8.3 Control Quality:

10.3 Control Communications:

11.6 Control Risks:

12.3 Control Procurements:

13.4 Control Stakeholder Engagement:

Project Management Process Groups

Initiating	Planning	Executing	Monitoring & Controlling	Closing
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Project
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Knowledge Areas

4.4

5.5

6.7

7.4

8.3

10.3

11.6

12.3

13.4

of questions

26

48

60

50

16

Monitoring & Control Process Group

Monitoring & Control Process Group

What & Why?

These are the processes required to **track, review and orchestrate the progress and performance** of the project

Influence & encourage factors that could bypass the integrated change control process so only approved changes are implemented

To identify any areas in which **changes are required**

Initiate changes

Project performance is measured and analyzed at regular intervals or when appropriate

Monitoring & Control Process Group

What &
Why?

Monitor the ongoing activities against the project management plan and the project performance measurement **baseline**

Provide **insight into the health of a project** and identify any areas requiring attention

Recommend action in **anticipation** of possible problems

Monitoring & Control Process Group

As the project manager:

- you have a formal & complete project management plan
- you have plans in place for how and when to measure time, cost and scope
- you are accountable for meeting the time, cost and scope baselines
- you measure the project against the project management plan and other metrics to see how the project is performing
- you take action to correct any variances that warrant it
- you make up any deviations from within the project rather than requesting a formal change
- update project documents as necessary

Project Management Process Groups

Initiating	Planning	Executing	Monitoring & Controlling	Closing
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Project
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Management

4.1

4.2

4.3

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4.5

4.6

Knowledge Areas

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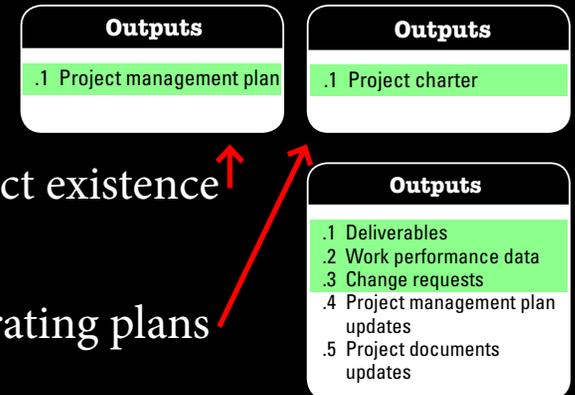
12. Procurement

13. Stakeholder

Project Integration Management

Project Integration Management

(PMBOK Chapter 4)



Initiating
Process Group

4.1 Develop Project Charter: authorizes project existence

Planning
Process Group

4.2 Develop Project Management Plan: integrating plans

Executing
Process Group

4.3 Direct and Manage Project Work: leading, performing, implementing

Monitoring &
Controlling
Process Group

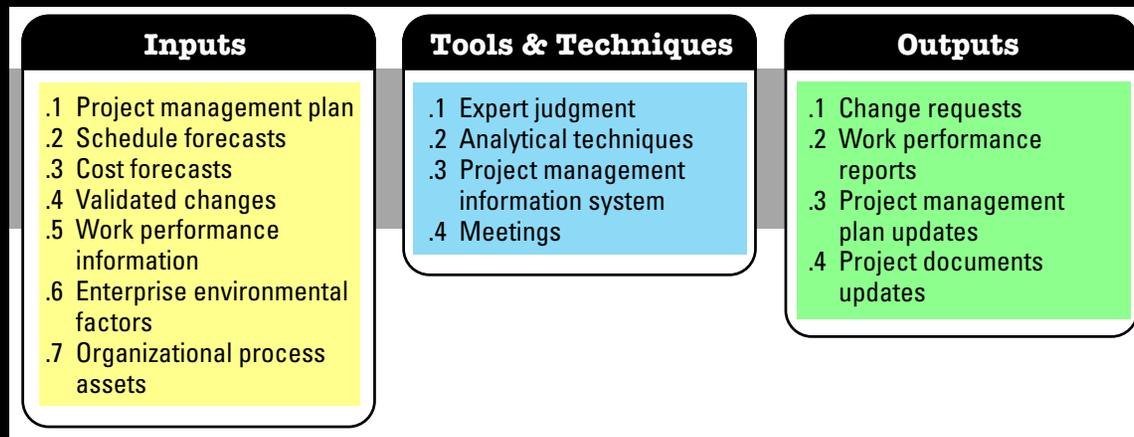
4.4 Monitor and Control Project Work: tracking, reviewing, reporting

4.5 Perform Integrated Change Control: reviewing, approving, managing

Closing
Process Group

4.6 Close Project or Phase: finalizing activities

4.4 Monitor and Control Project Work



What & Why?

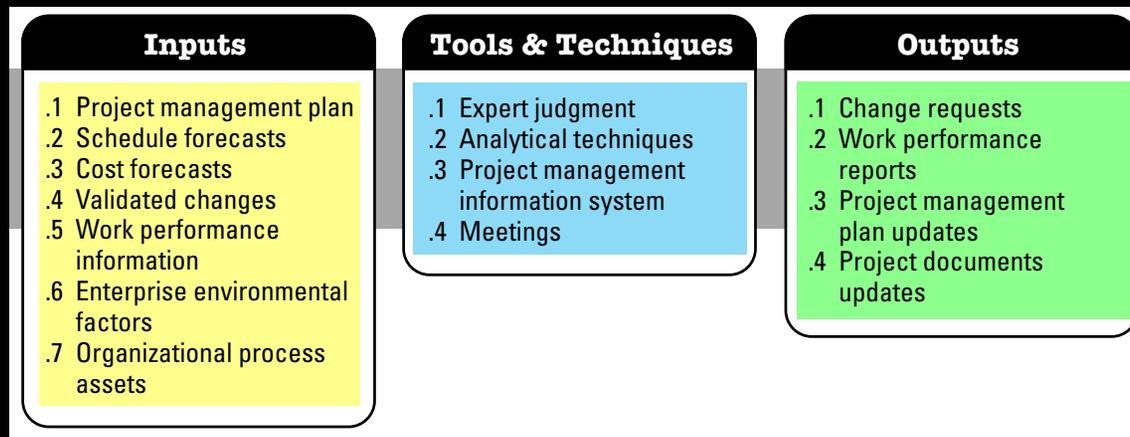
To **track, review and report** on project progress (throughout the project)

- budget, schedule and scope forecasts
- status and progress reports

Maintain accurate & timely information concerning the project's activities and products through to completion

Identify new risks

4.4 Monitor and Control Project Work



What & Why?

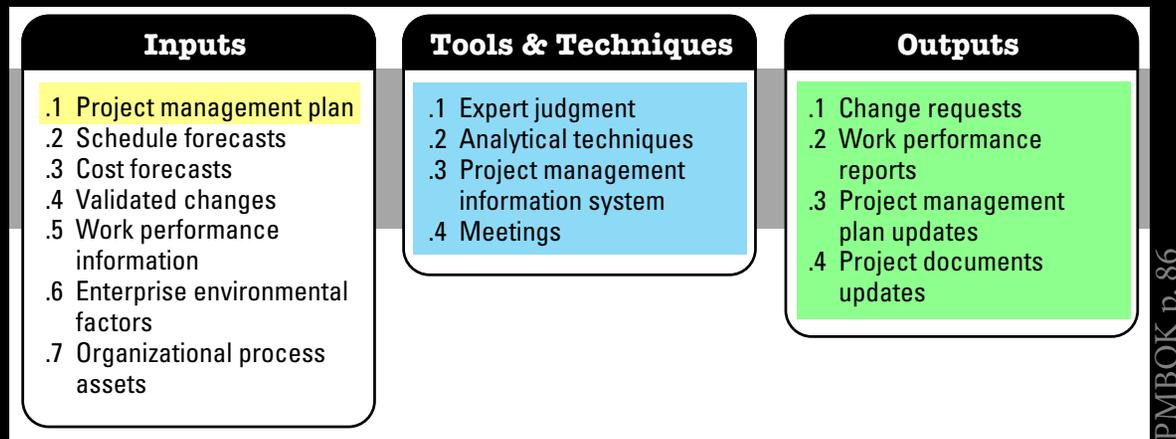
Analyze, track and monitor existing risks to make sure they are reported and that risk response plans are executed

Monitor the implementation of approved changes

Implement process improvements

Follow up on action plans to determine whether they resolved the issue

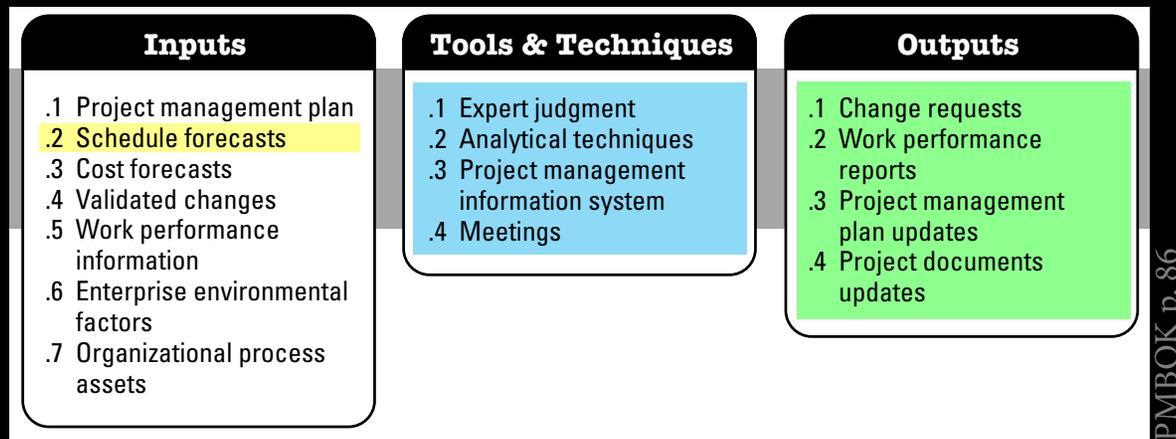
4.4 Monitor and Control Project Work



Project Management Plan:

- Scope management plan (5.1.3.1)
- Requirements management plan (5.1.3.2)
- Schedule management plan (6.1.3.1)
- Cost management plan (7.1.3.1),
- Quality management plan (8.1.3.1)
- Process improvement plan (8.1.3.2)
- Human resource management plan (9.1.3.1)
- Communications management plan (10.1.3.1)
- Risk management plan (11.1.3.1)
- Procurement management plan (12.1.3.1)
- Stakeholder management plan (13.2.3.1)
- Scope baseline (5.4.3.1)
- Schedule baseline (6.6.3.1)
- Cost baseline (7.3.3.1)

4.4 Monitor and Control Project Work



Schedule Forecasts (Control Schedule 6.7.3.2):

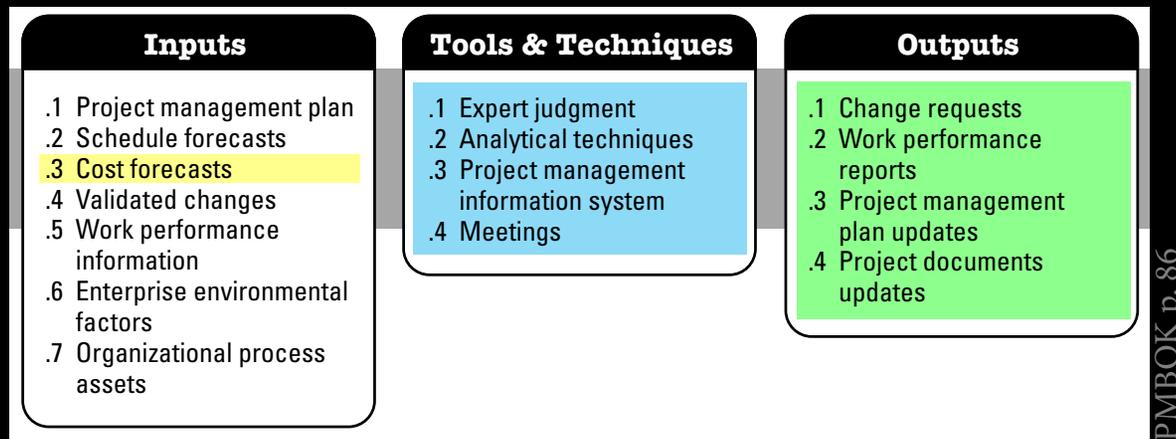
Comparing **actual progress against the schedule baseline** to determine if the project is still within defined tolerance ranges

Compute the **estimate to complete (ETC)** time which is expressed in terms of **schedule variance (SV)** and **schedule performance index (SPI)**

Identify if a change request is necessary

If a project is not using earned value management the difference between planned finish dates and forecasted finish dates are used

4.4 Monitor and Control Project Work



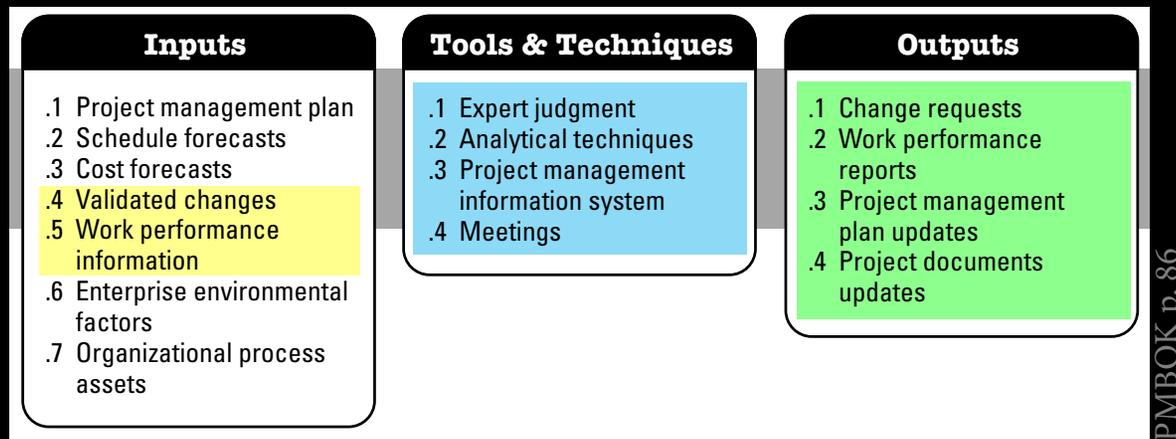
Cost Forecasts (Control Costs 7.4.3.2):

Compare **actual progress** against the **cost baseline**

Compute **estimates to complete** (ETC) which is expressed in terms of **cost variance** (CV) & **cost performance index** (CPI)

If a project is not using earned value management the difference between planned and actual expenditures is used

4.4 Monitor and Control Project Work

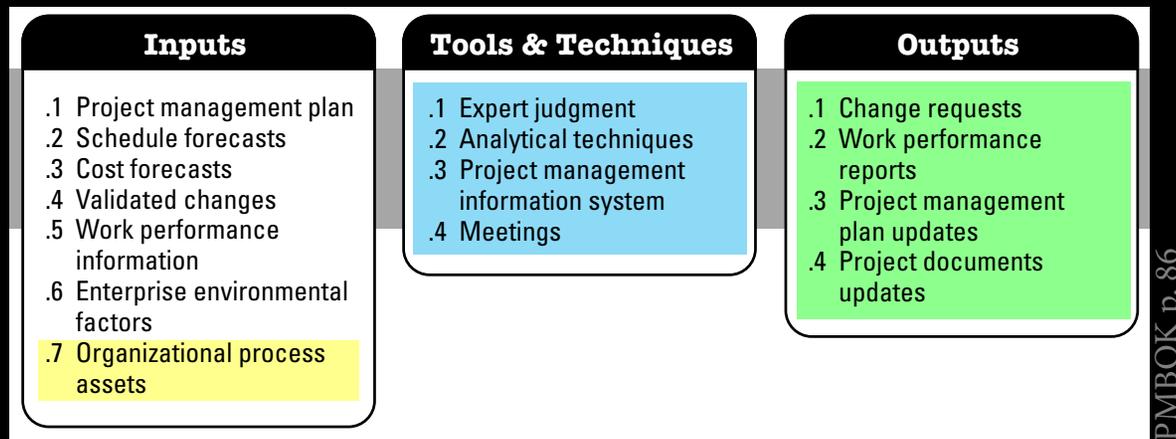


Validated Changes (Control Quality 8.3.3.2): confirm that the change was appropriately executed

Work Performance Information, the analyzed work performance data including:

- Status of deliverables
- Implementation status of change requests
- Forecasted estimates to completion

4.4 Monitor and Control Project Work



Organizational Process Assets, such as:

Communication requirements

Financial controls procedures (time reporting & accounting codes)

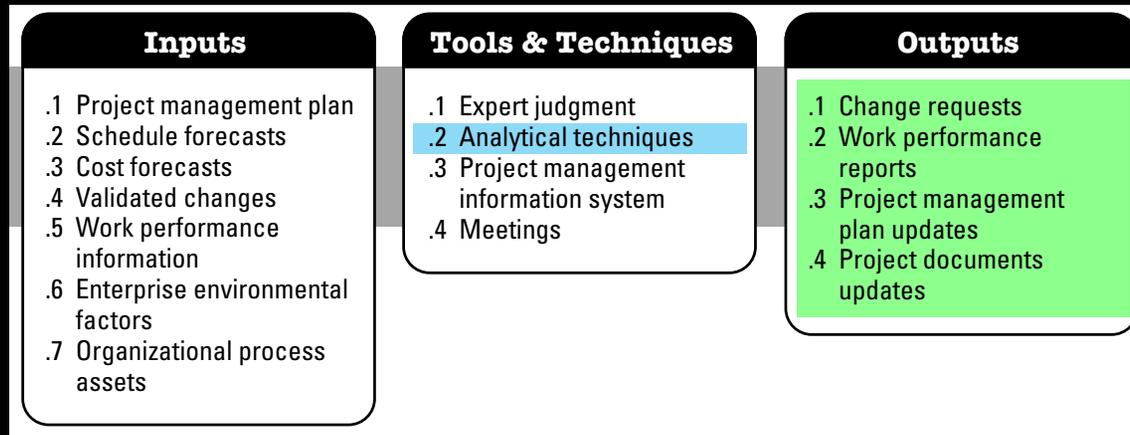
Issue and defect management procedures

Change control procedures (for scope, schedule, cost and quality)

Risk control procedures as well as risk categories, definition, probability and impact

Lessons learned database.

4.4 Monitor and Control Project Work

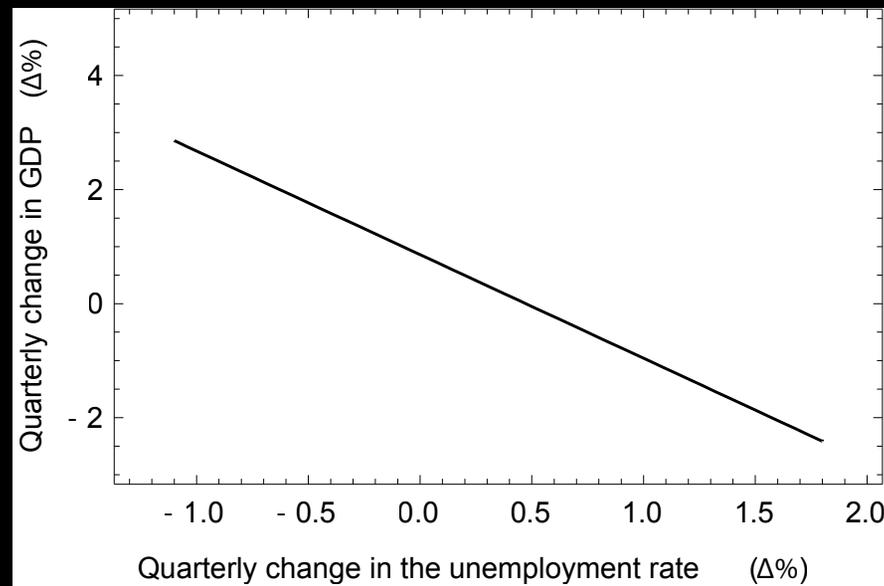


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Analytical Techniques: used to forecast potential outcomes based on possible variations of project or other variables

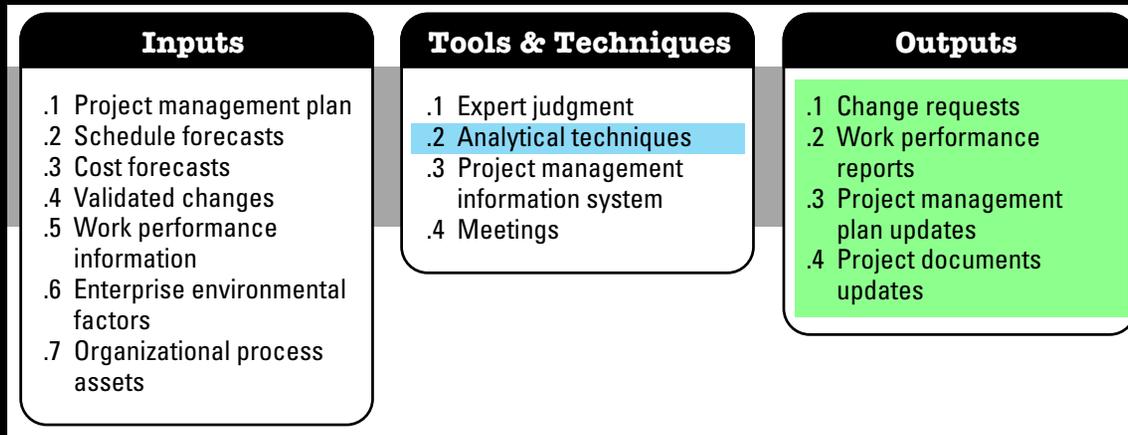
- **Regression analysis:** variables are examined to develop statistical relationships

Scatter Diagram



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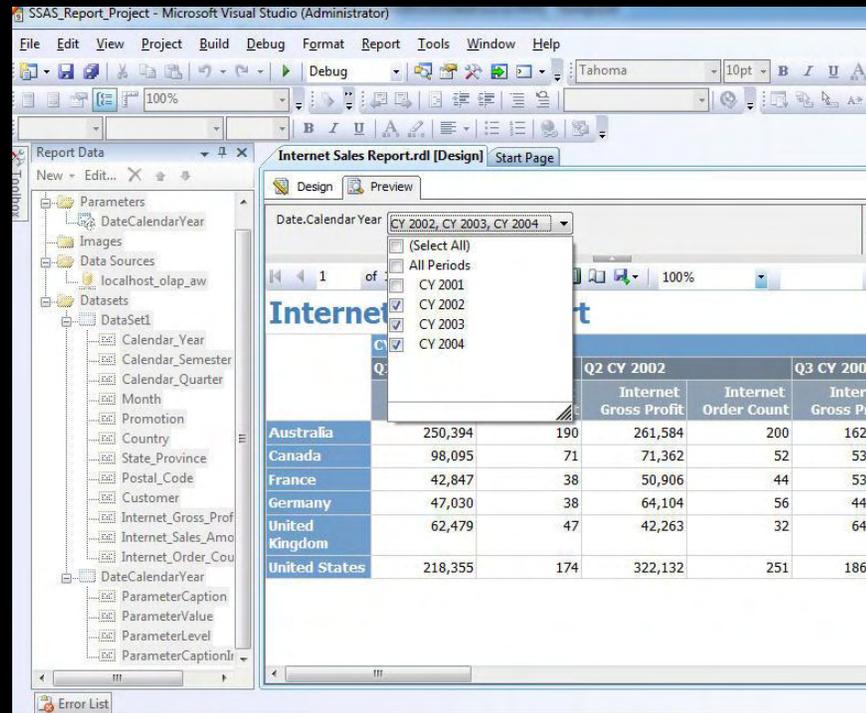
4.4 Monitor and Control Project Work



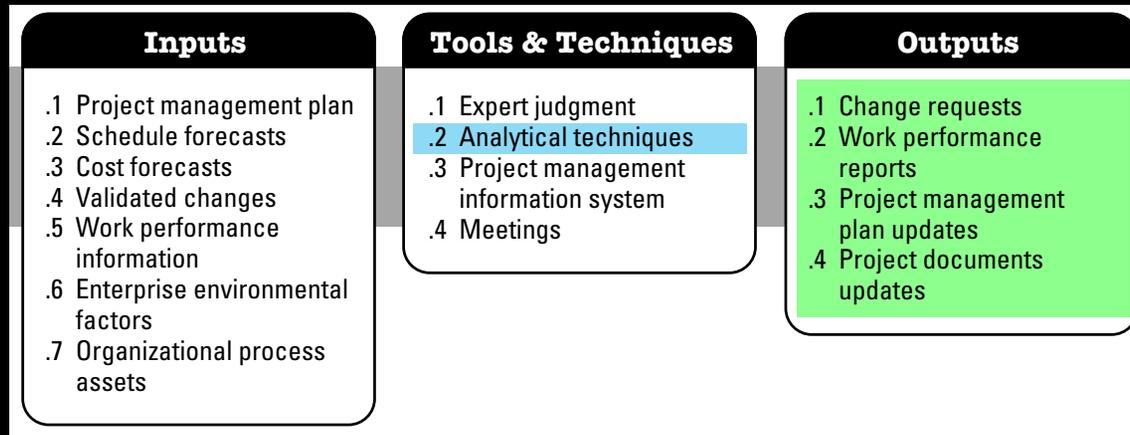
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- **Grouping methods:** using computer based modeling techniques

MS SQL lookup
(see also My SQL)

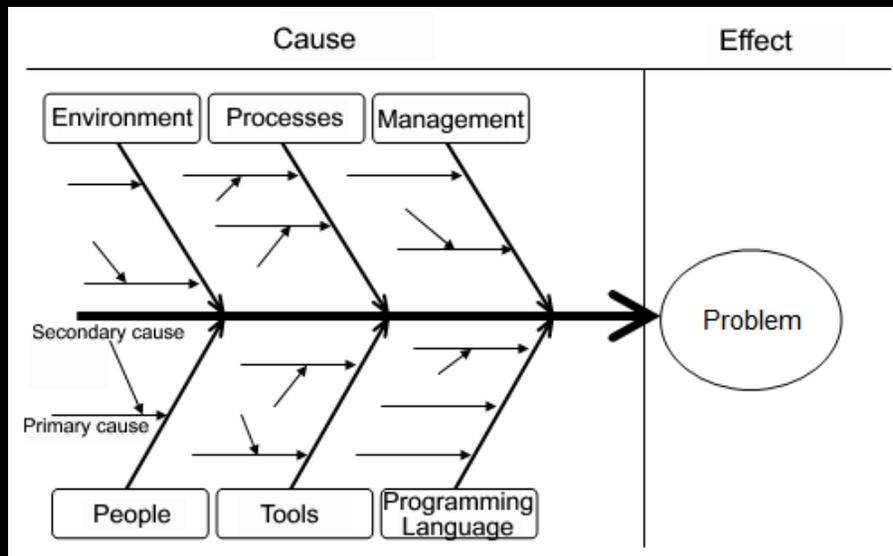


4.4 Monitor and Control Project Work

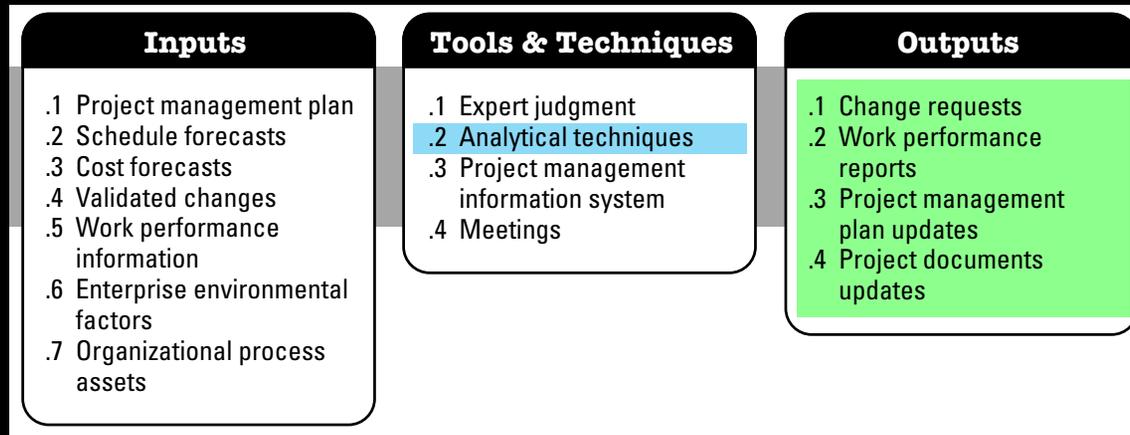


- **Causal analysis:** tries to identify the root causes of faults or problems
- **Root cause analysis:** a top down, deductive failure analysis
- **Forecasting methods** - Monte Carlo simulation, etc.

Ishikawa Diagram



4.4 Monitor and Control Project Work



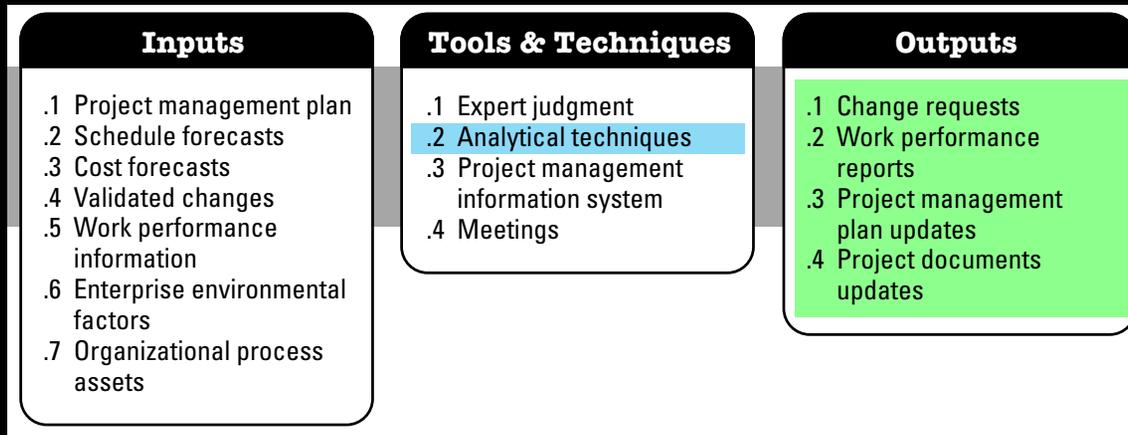
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Failure mode and effect analysis (FMEA) - Review as many components, assemblies, and subsystems as possible to identify failure and its causes and effects

FAILURE MODE & EFFECTS ANALYSIS (FMEA)				Date: 1/1/2000
Process Name: Left Front Seat Belt Install		Process Number: SBT 445		Revision: 1.3
Failure Mode	A) Severity Rate 1-10 10 = Most Severe	B) Probability of Occurance Rate 1-10 10 = Highest Probability	C) Probability of Detection Rate 1 - 10 10 = Lowest Probability	Risk Preference Number (RPN) AxBxC
1) Select Wrong Color Seat Belt	5	4	3	60
2) Seat Belt Bolt Not Fully Tightened	9	2	8	144
3) Trim Cover Clip Misaligned	2	3	4	24

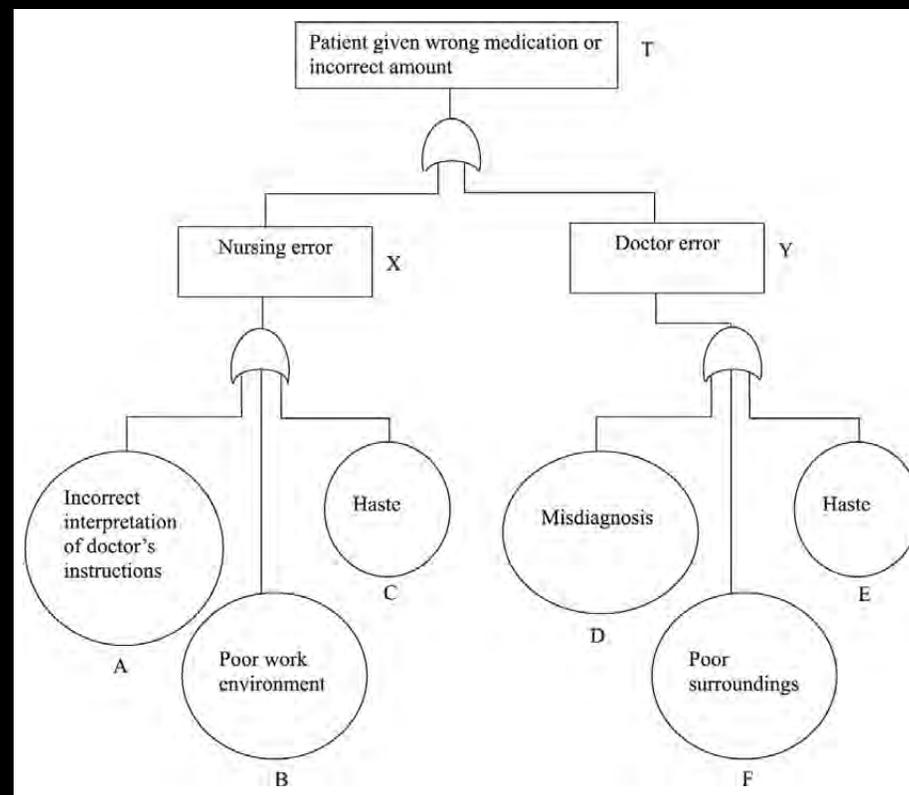
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4.4 Monitor and Control Project Work



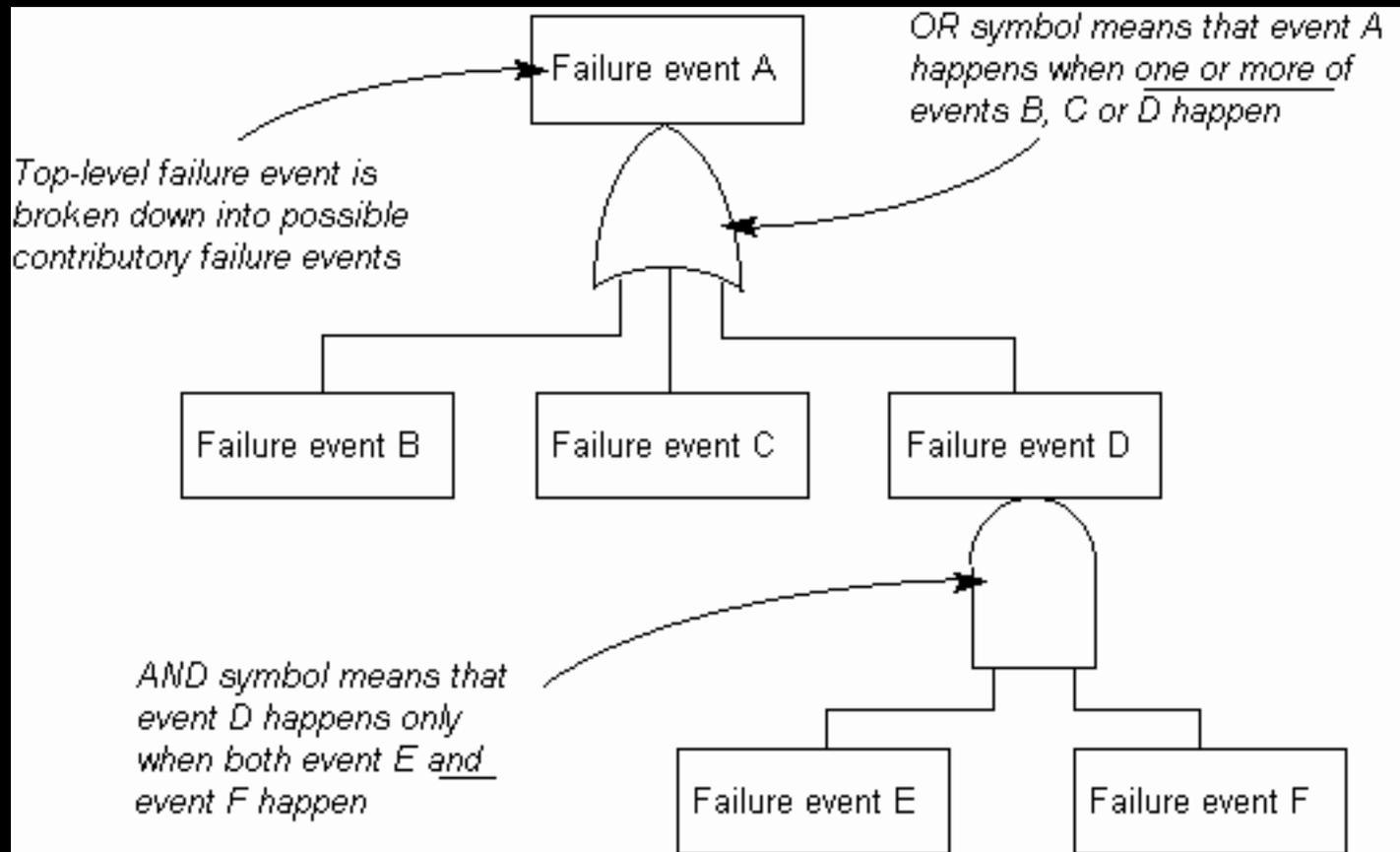
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Fault tree analysis (FTA) - see root cause analysis

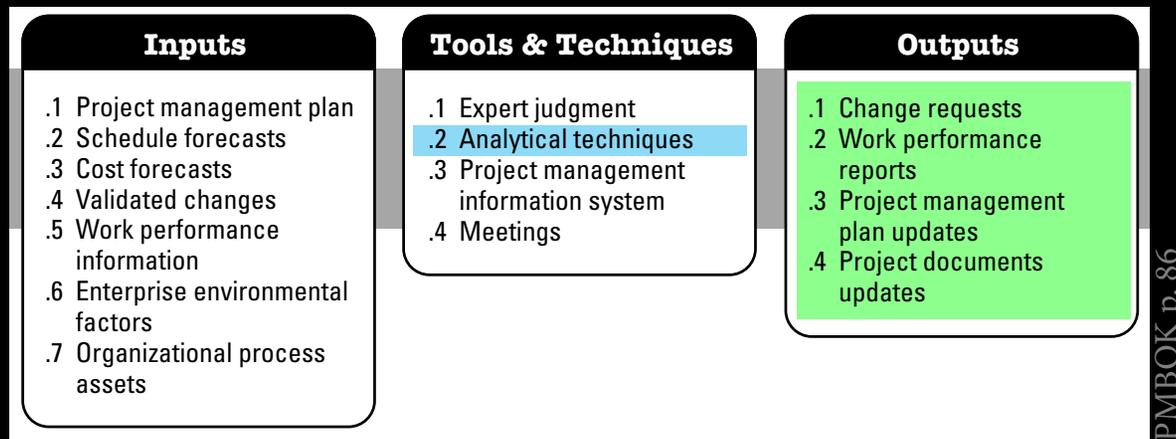


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Fault tree analysis symbols



4.4 Monitor and Control Project Work



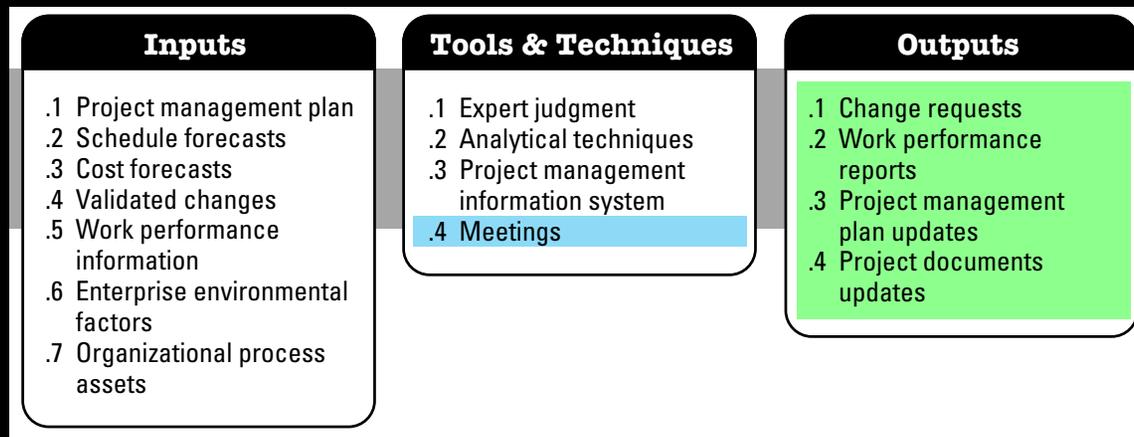
Reserve analysis - review the project management plan for which risks have a reserve

Trend analysis - use historical results to predict future outcomes for cost and schedule performance. This can also track technical performance such as the variance between defects reported and those corrected

Earned value management (7.4) - the value of the work completed vs the baseline budget for an activity, WBS component or project

Variance analysis - the difference between the actual performance and the performance baseline

4.4 Monitor and Control Project Work



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Meetings: What is the goal of your meeting?

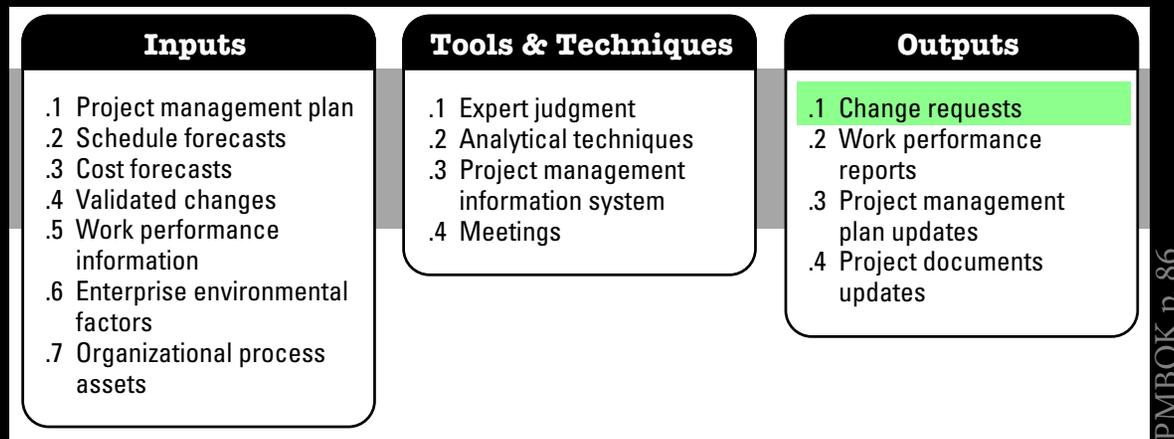
Information exchange

Brainstorming, evaluation or design

Decision making

Plan accordingly

4.4 Monitor and Control Project Work



Change Requests, to the project or product scope, quality requirements and/or schedule and cost baselines

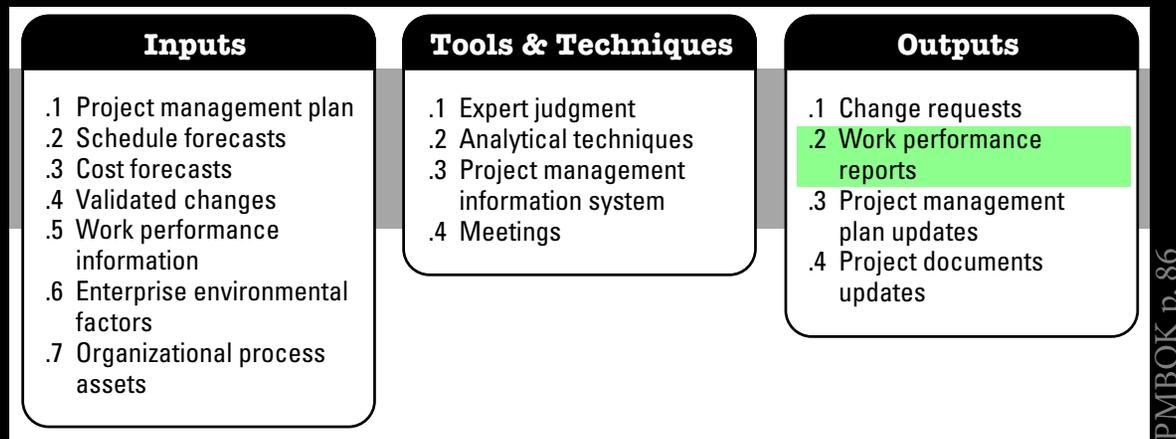
Once they are approved you can:

Take **corrective action** - activity that realigns the performance of the project work with the project management plan

Take **preventive action** - activity that ensures the future performance of the project work is aligned with the project management plan

Under take **defect repair** - activity to modify a nonconforming product or product component

4.4 Monitor and Control Project Work



Work Performance Reports: is the **organized data** intended to create:

Awareness

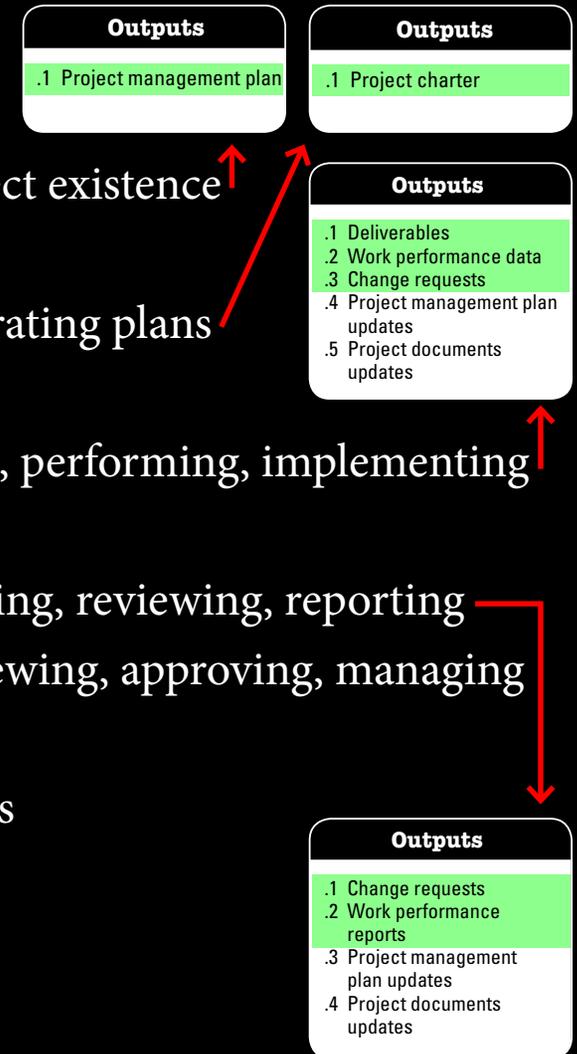
Generate decisions or actions

A subset of project documents

- status reports
- memos
- justifications
- information notes
- recommendations
- updates

Project Integration Management

(PMBOK Chapter 4)



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Q&A

Question

6. The MOST common causes of conflict on a project are schedules, project priorities, and:
- A. Personality.
 - B. Resources.
 - C. Cost.
 - D. Management.

Answer

6. Answer B

Explanation Know the top four sources of conflict on projects (schedules, project priorities, resources, and technical opinions) so you can answer questions such as this one. Don't be fooled because "personality" is on the list. It is not a major cause of conflict.

Question

7. What conflict resolution technique is a project manager using when he says, “I cannot deal with this issue now!”
- A. Problem solving
 - B. Forcing
 - C. Withdrawal
 - D. Compromising

Answer

7. **Answer C**

Explanation Delaying the issue is called withdrawal.

Question

8. What does a resource histogram show that a responsibility assignment matrix does not?
- A. Time
 - B. Activities
 - C. Interrelationships
 - D. The person in charge of each activity

Answer

8. Answer A

Explanation The responsibility assignment matrix maps specific resources to the work packages from the WBS. On a resource histogram, the use of resources is shown individually or by groups over time.

Question

9. You have just been assigned as project manager for a large telecommunications project. This one-year project is about halfway done. The project team consists of 5 sellers and 20 of your company's employees. You want to understand who is responsible for doing what on the project. Where would you find such information?
- A. Responsibility assignment matrix
 - B. Resource histogram
 - C. Bar chart
 - D. Project organization chart

Answer

9. Answer A

Explanation The resource histogram shows the number of resources used in each time period. In its pure form, a bar chart shows only activity and calendar date. The organizational chart shows who reports to whom. The responsibility assignment matrix shows who will do the work.

Question

10. During project planning in a matrix organization, the project manager determines that additional human resources are needed. From whom would she request these resources?
- A. The PMO manager
 - B. The functional manager
 - C. The team
 - D. The project sponsor

Answer

10. **Answer B**

Explanation In a matrix organization, power is shared between the functional manager and the project manager, so the project manager needs to negotiate with the functional manager for the resources.

Question

11. A project manager must publish a project schedule. Activities, start/end times, and resources are identified. What should the project manager do NEXT?
- A. Distribute the project schedule according to the communications management plan.
 - B. Confirm the availability of the resources.
 - C. Refine the project management plan to reflect more accurate costing information.
 - D. Publish a bar chart illustrating the timeline.

Answer

11. **Answer B**

Explanation The project schedule remains preliminary until resource assignments are confirmed.

Question

12. During every project team meeting, the project manager asks each team member to describe the work he or she is doing, and the project manager assigns new activities to team members. The length of these meetings has increased because there are many different activities to assign. This could be happening for all the following reasons EXCEPT:
- A. Lack of a WBS.
 - B. Lack of a responsibility assignment matrix.
 - C. Lack of resource leveling.
 - D. Lack of team involvement in project planning.

Answer

12. Answer C

Explanation The lack of a WBS, responsibility assignment matrix, or team involvement in planning could contribute to excessively long meetings to assign resources to activities. Resource leveling refers to maintaining the same number of resources on the project for each time period and would not impact the length of meetings.

Question

13. You are a project manager leading a cross-functional project team in a weak matrix environment. None of your project team members report to you functionally and you do not have the ability to directly reward their performance. The project is difficult, involving tight date constraints and challenging quality standards. Which of the following types of project management power will likely be the MOST effective in this circumstance?
- A. Referent
 - B. Expert
 - C. Penalty
 - D. Formal

Answer

13. Answer B

Explanation Reward and expert are the best types of power to use in such a circumstance. Reward is not listed as a choice, and the question says the project manager has limited ability to reward the team members. Therefore, expert power is the correct answer.

Auf Wiedersehen

(good bye)