

Hujambo

(Swahili)

Project Management Process Groups				
Initiating	Planning	Executing	Monitoring & Controlling	Closing

Project
4. Integration
Management

Knowledge Areas

5. Scope

6. Time

7. Cost

8. Quality

9. Human Resources

10. Communications

11. Risk

12. Procurement

13. Stakeholder

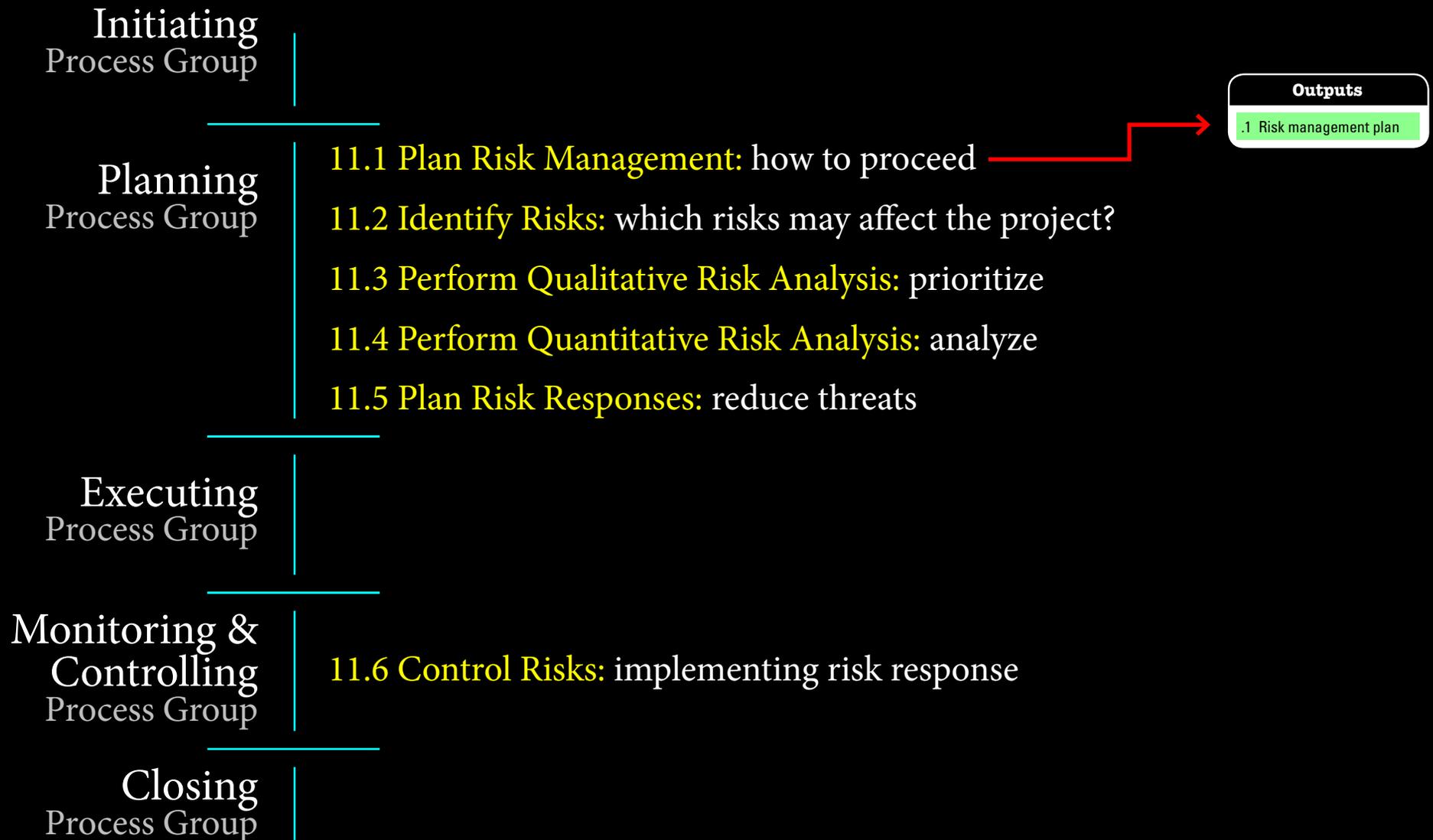


11.
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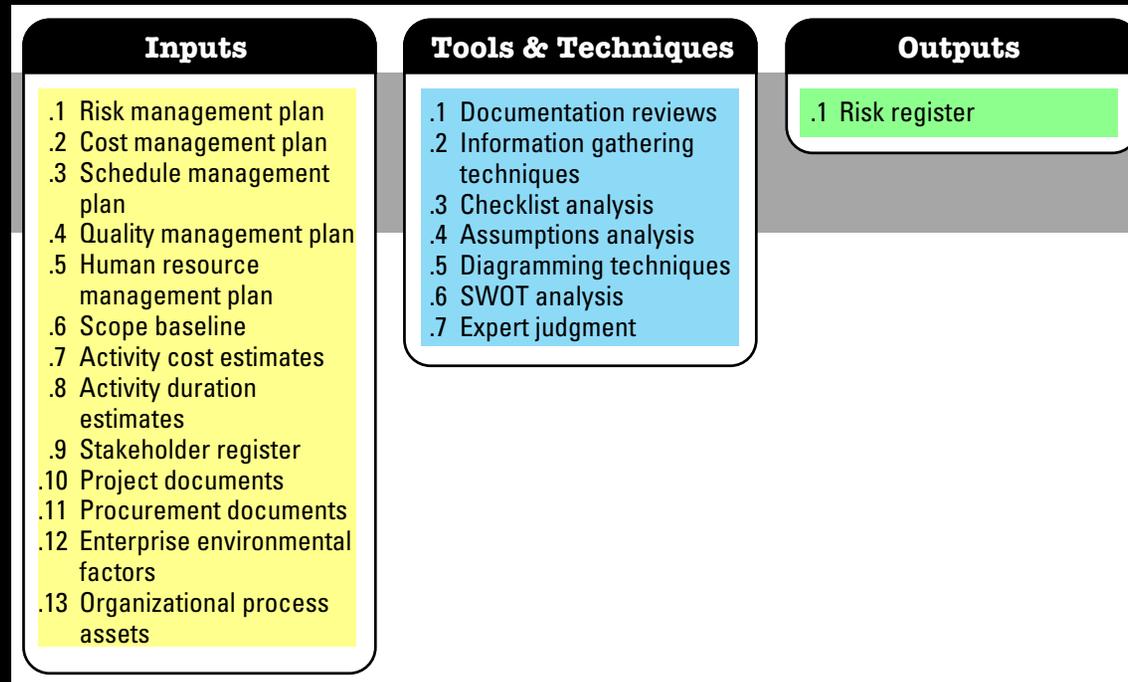
11.6

Project Risk Management

Project Risk Management



11.2 Identify Risks



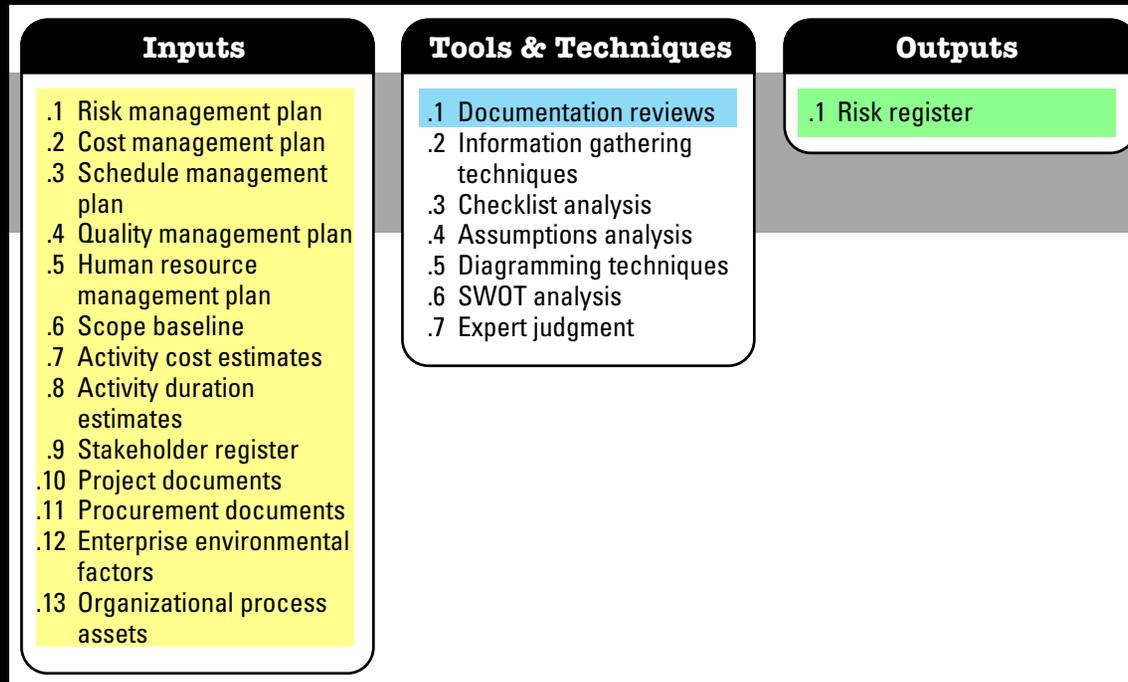
What & Why?

The majority of **risk identification** occurs in **planning**

Risk identification **is iterative**

Everyone involved in the project can/should be involved in identifying risk

11.2 Identify Risks

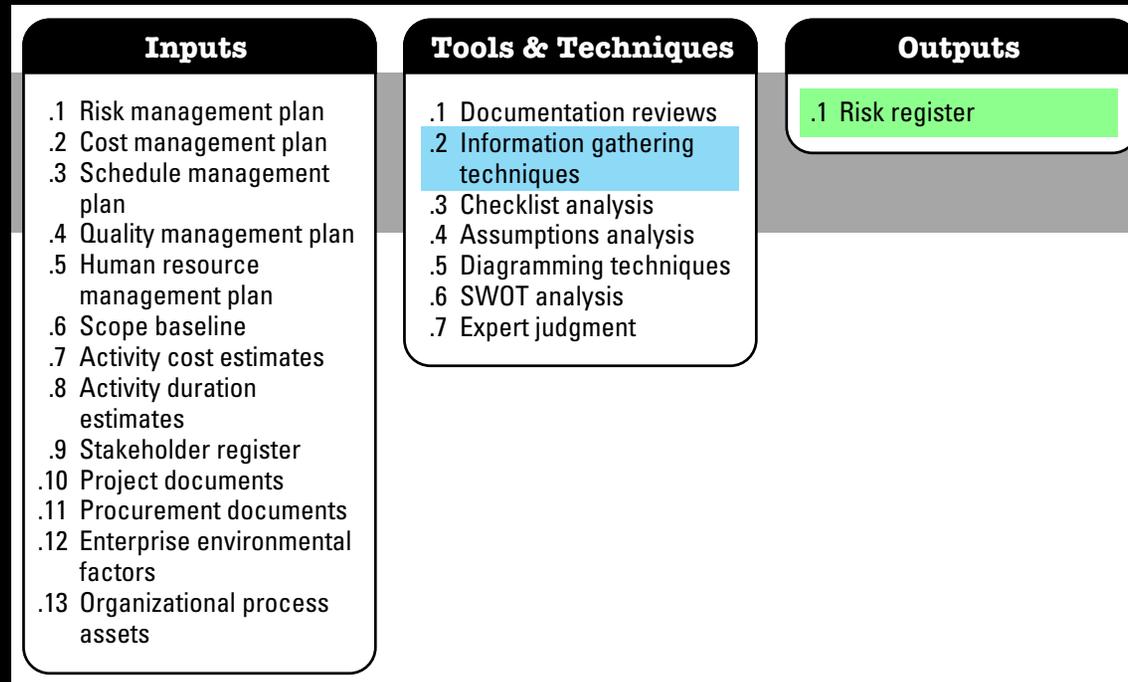


What & Why?

Inputs: Which document would you look at first?

Documentation reviews: What is or is not included in the documentation?

11.2 Identify Risks



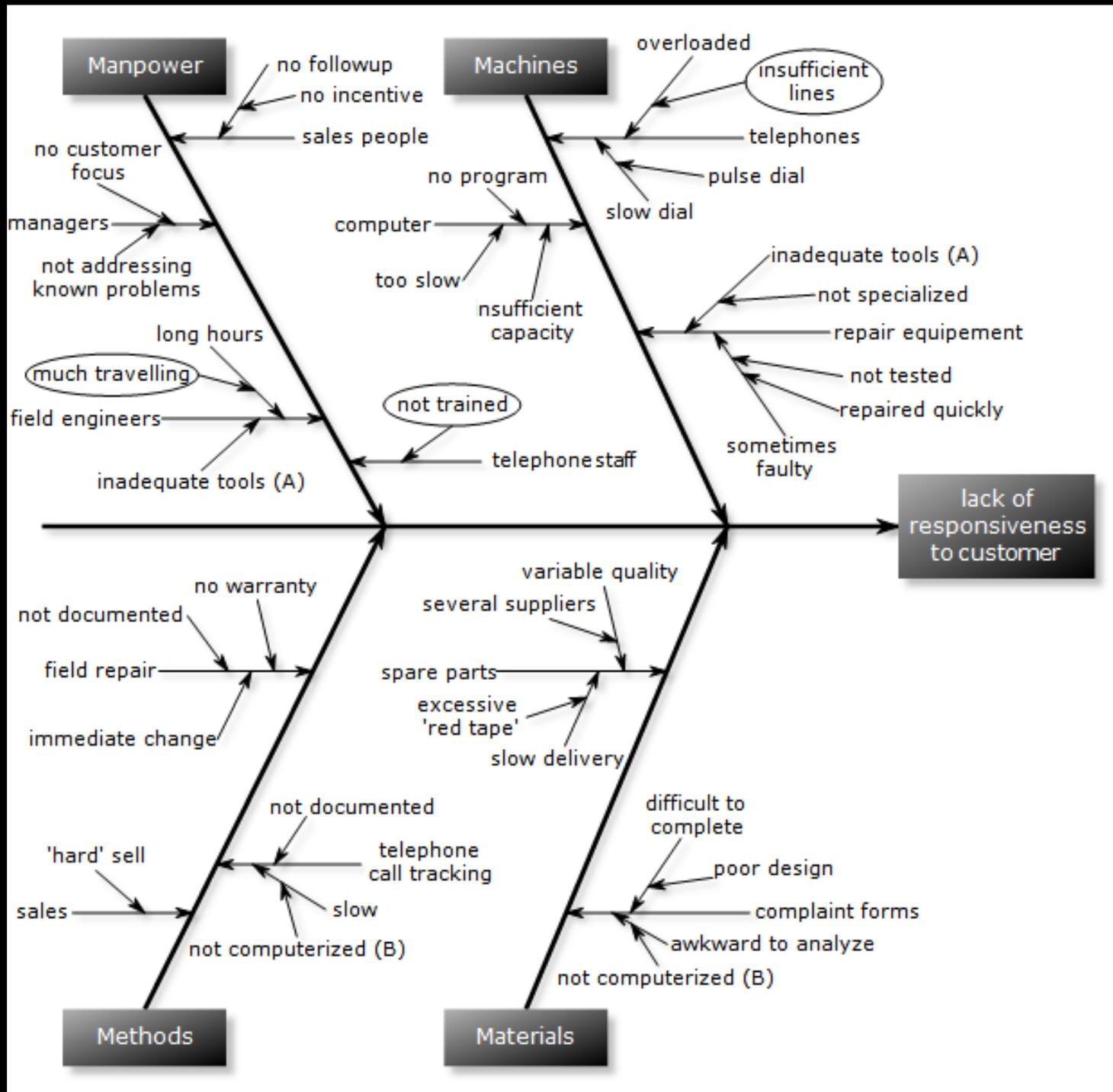
Information Gathering Techniques:

Brainstorming - use the WBS or RBS as outline for discussion

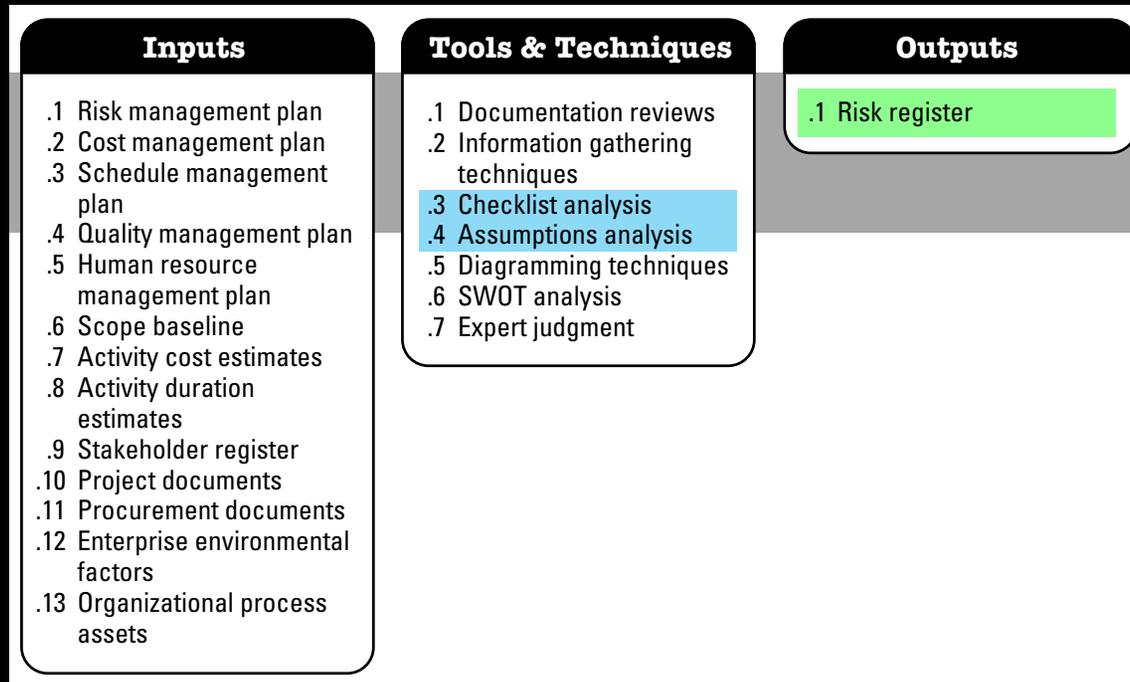
Delphi technique - goal: consensus among experts

Interviewing

Root cause analysis - fishbone / Ishikawa (see next page)



11.2 Identify Risks



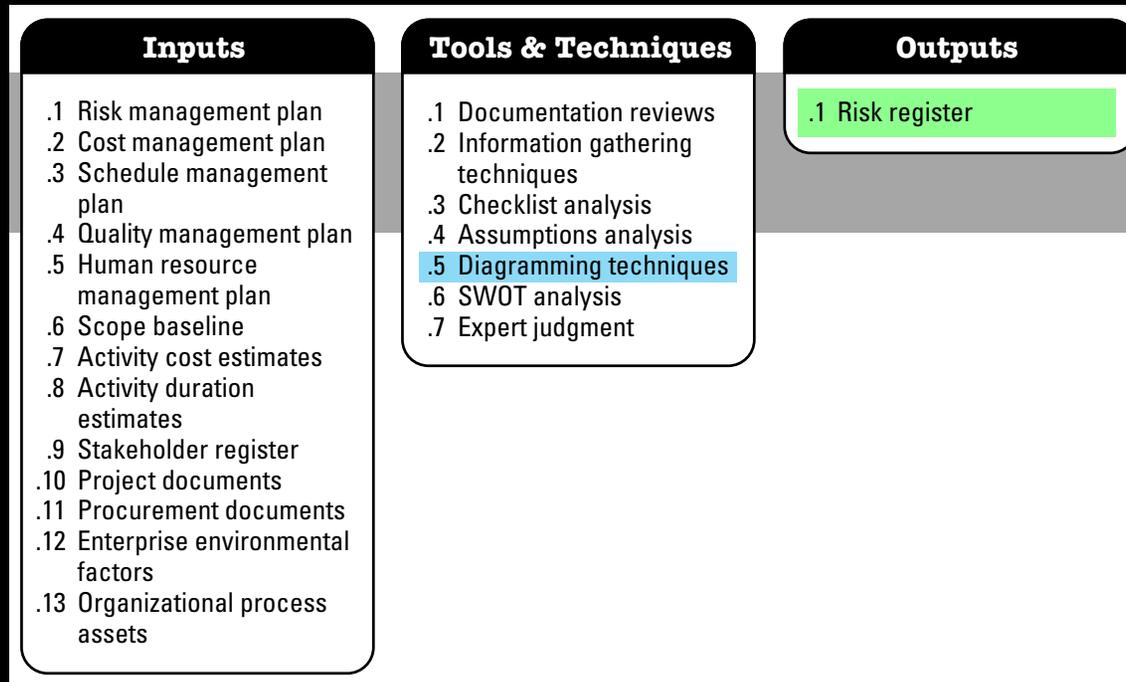
Checklist Analysis: use check lists which are:

- based on historical information and knowledge
- created from the lowest level of the RBS

Lists do not necessarily capture all of the risk - dig deeper

Assumptions Analysis: What assumptions have been made about the project?

11.2 Identify Risks



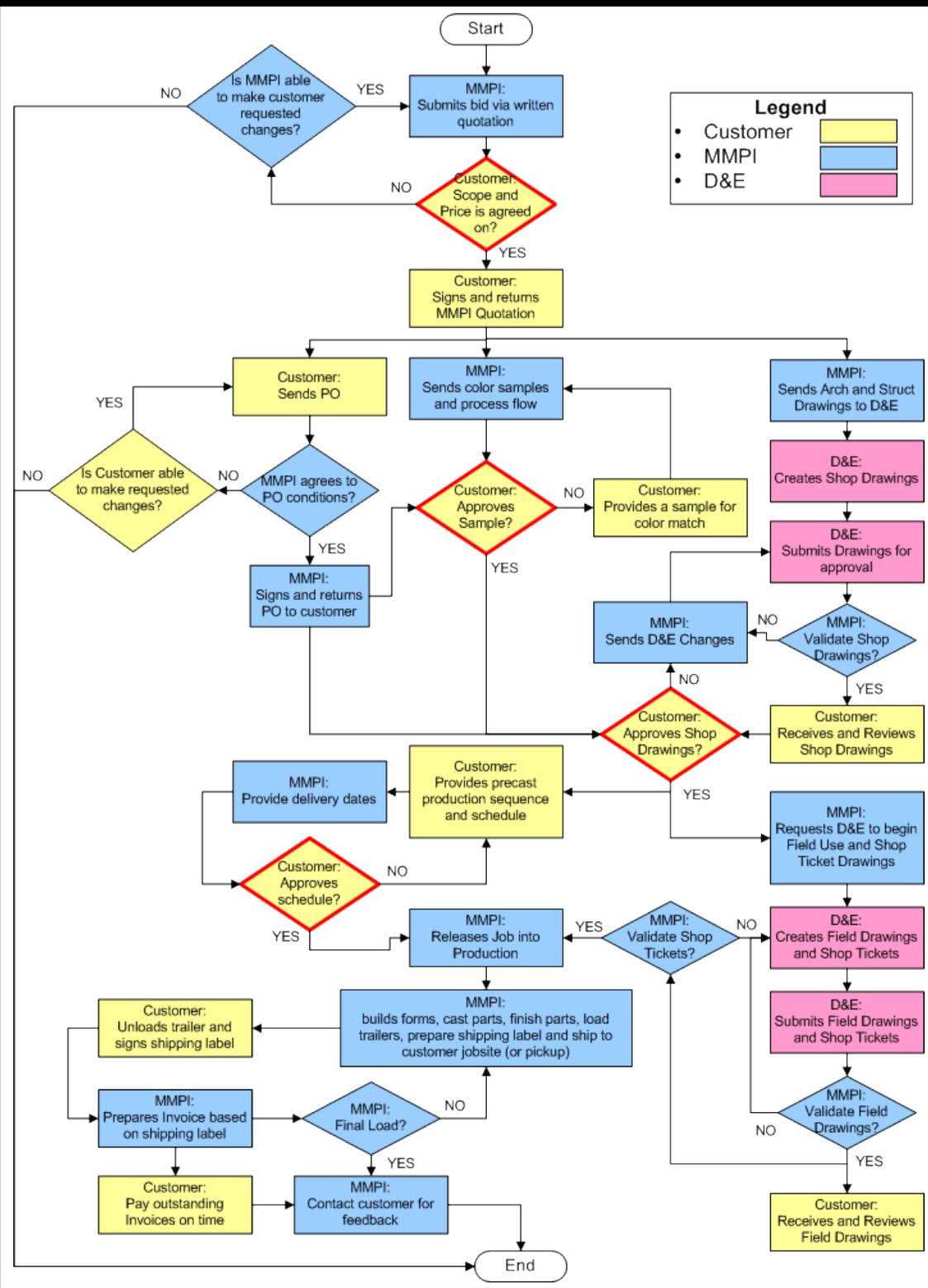
Diagramming Techniques:

Cause and effect diagrams (Root cause analysis): fishbone / Ishikawa

Flow charts: systems or processes

- see example next page
- use draw.io to create diagrams

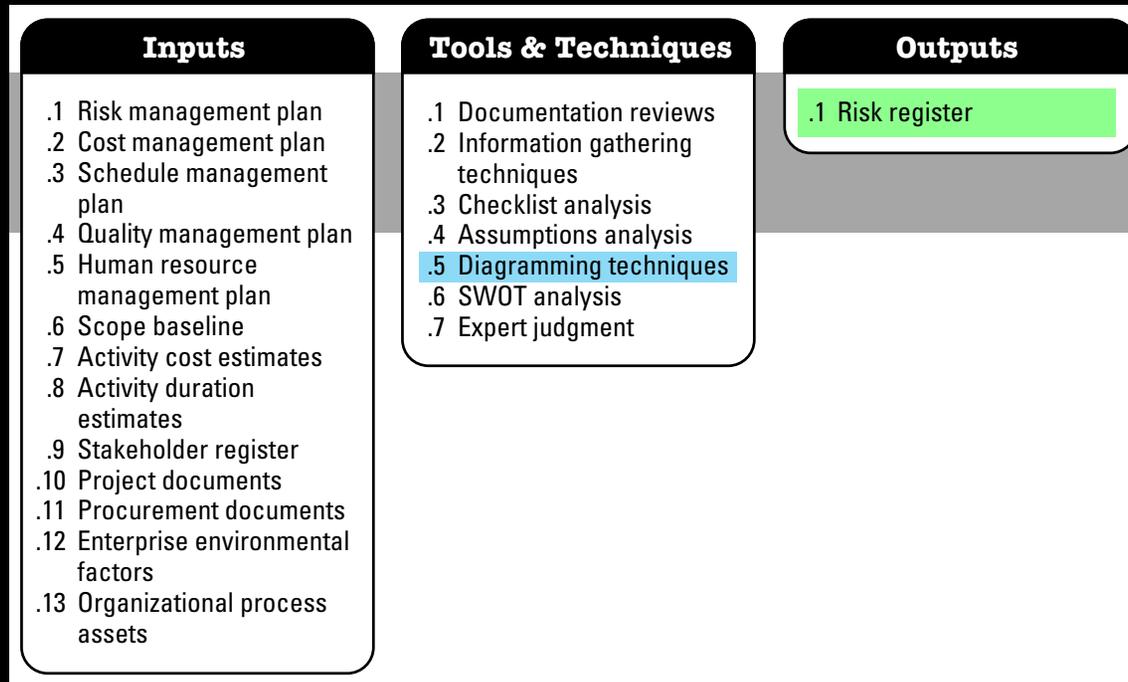
Process flow chart for precast concrete panels



Legend

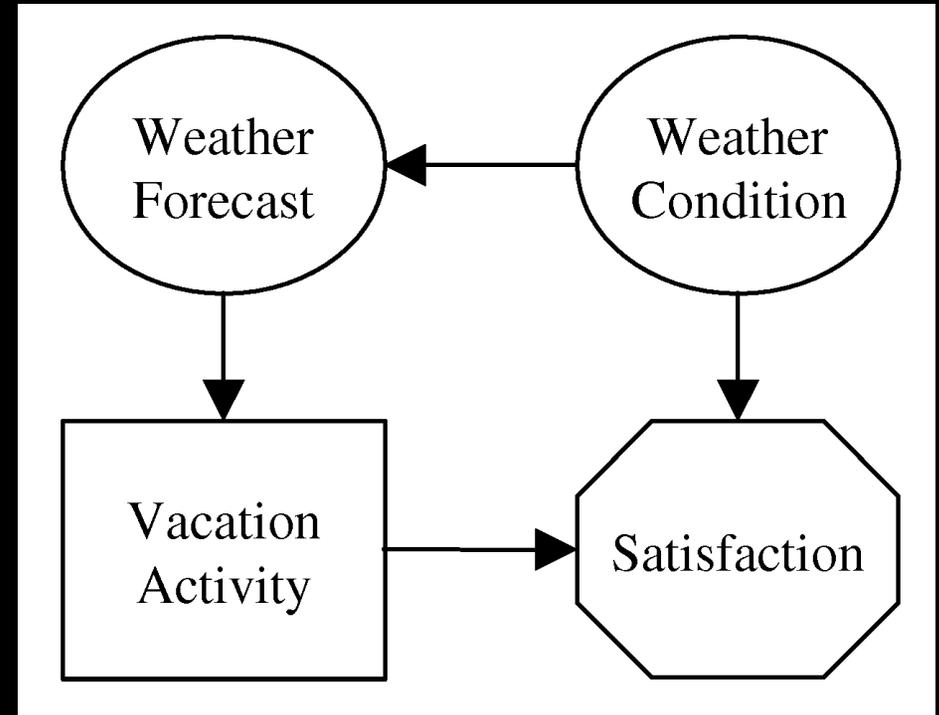
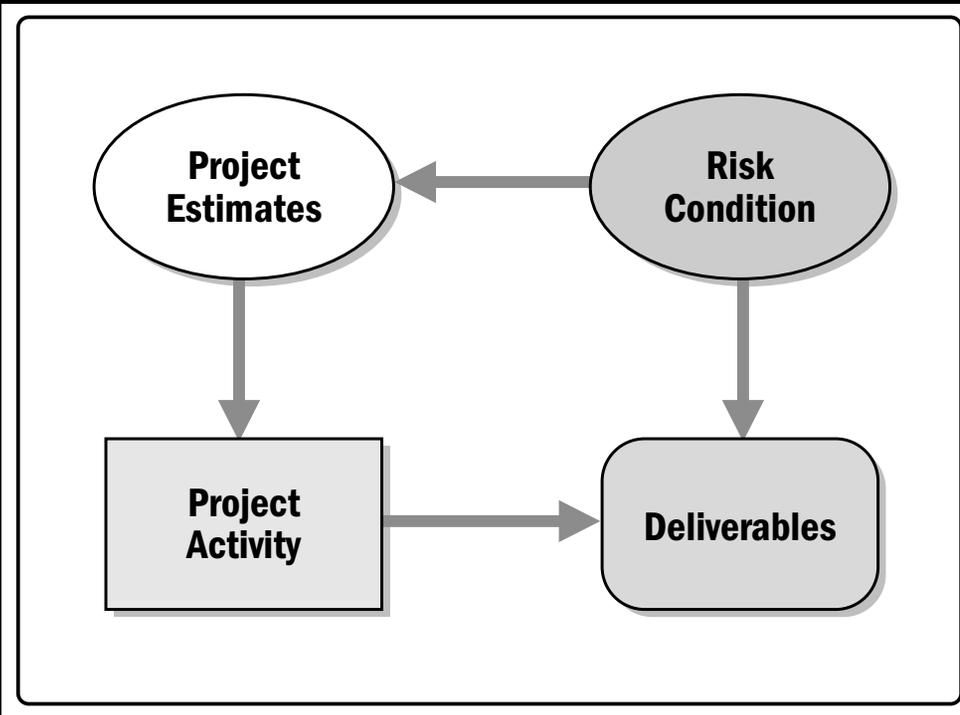
- Customer
- MMPI
- D&E

11.2 Identify Risks



Diagramming Techniques:

Influence diagrams - shows influences and relationships among variables and outcomes



Decision

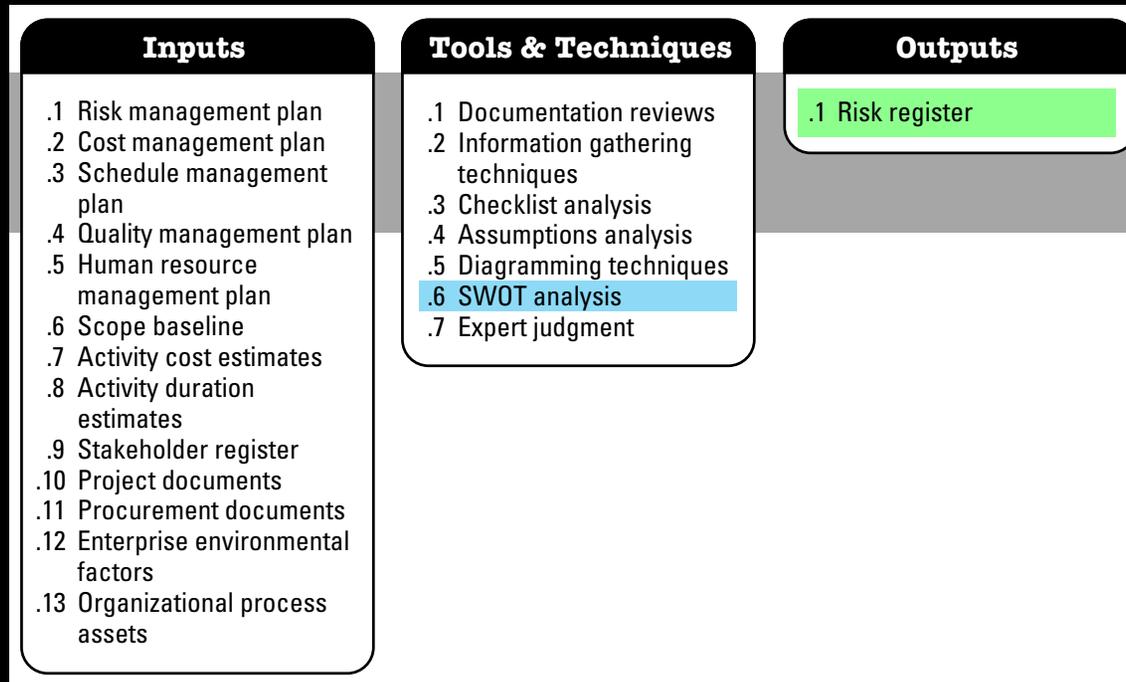
Chance

Objective

(uncertainty)

Check the web site for a complex example

11.2 Identify Risks



SWOT Analysis: - examines **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats

- 1) **identify** the strengths and weaknesses
- 2) **identify** opportunities and threats
- 3) **examine** how strengths offset threats
- 4) **identify** how opportunities may overcome weaknesses

SWOT ANALYSIS

	Helpful to achieving the objective	Harmful to achieving the objective
Internal origin (attributes of the organization)	S Strengths	W Weaknesses
External origin (attributes of the environment)	O Opportunities	T Threats

Strengths:

- We have a creative team with an impressive list of technical skills
- We are well versed in the business side of the project, our team includes former executives and business consultants
- We have sufficient financial resources necessary to participate in such projects

Weaknesses

- Our human resources are already strained out over existing projects
- Geographically our office is far removed from the potential customer headquarters
- We are not politically connected
- Our top people are not built for long, dull and repetitive tasks

SWOT Analysis: Shall we chase the government contract?

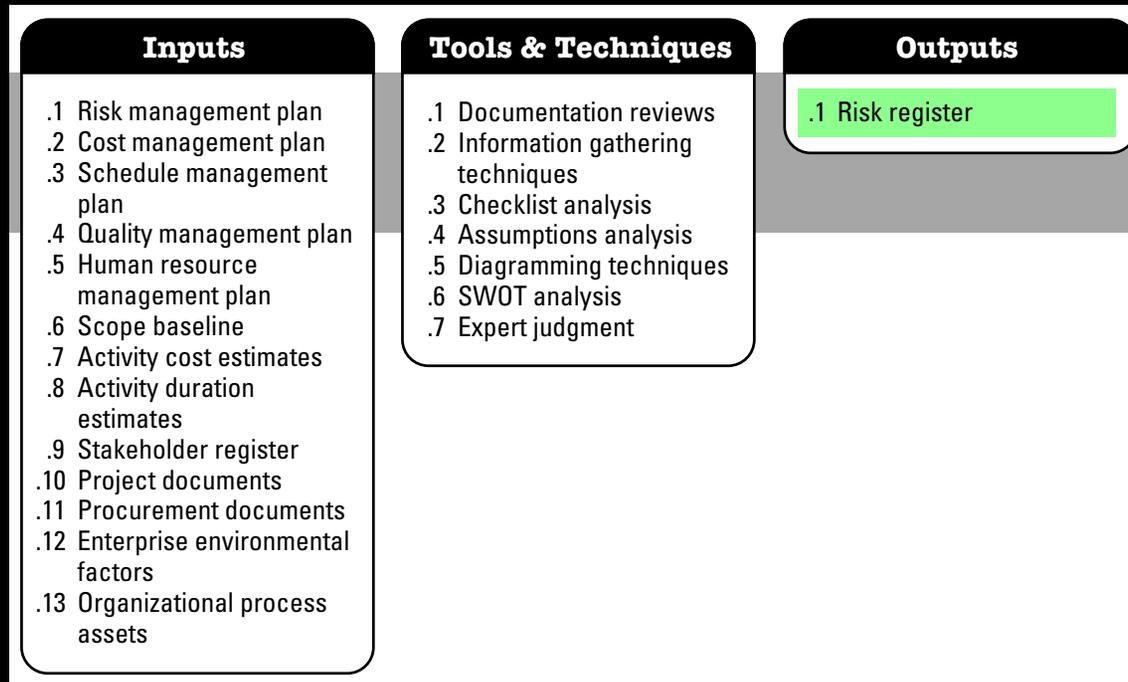
Opportunities

- This government contract can bring a significant revenue increase
- Once we are in the system, we can get more government orders
- Listing this project in our portfolio would boost our image with government and public organizations

Threats

- We can lose our old customers by diverting our resources to the new project
- Travel costs could be prohibitively high and in the long run can seriously undermine revenue increase
- Bidding process could be a serious drag on our financial and human resources

11.2 Identify Risks



Risk Register: A record of the risk analysis and risk response planning.

List of risks with as much detail as possible including their cause

List of potential responses

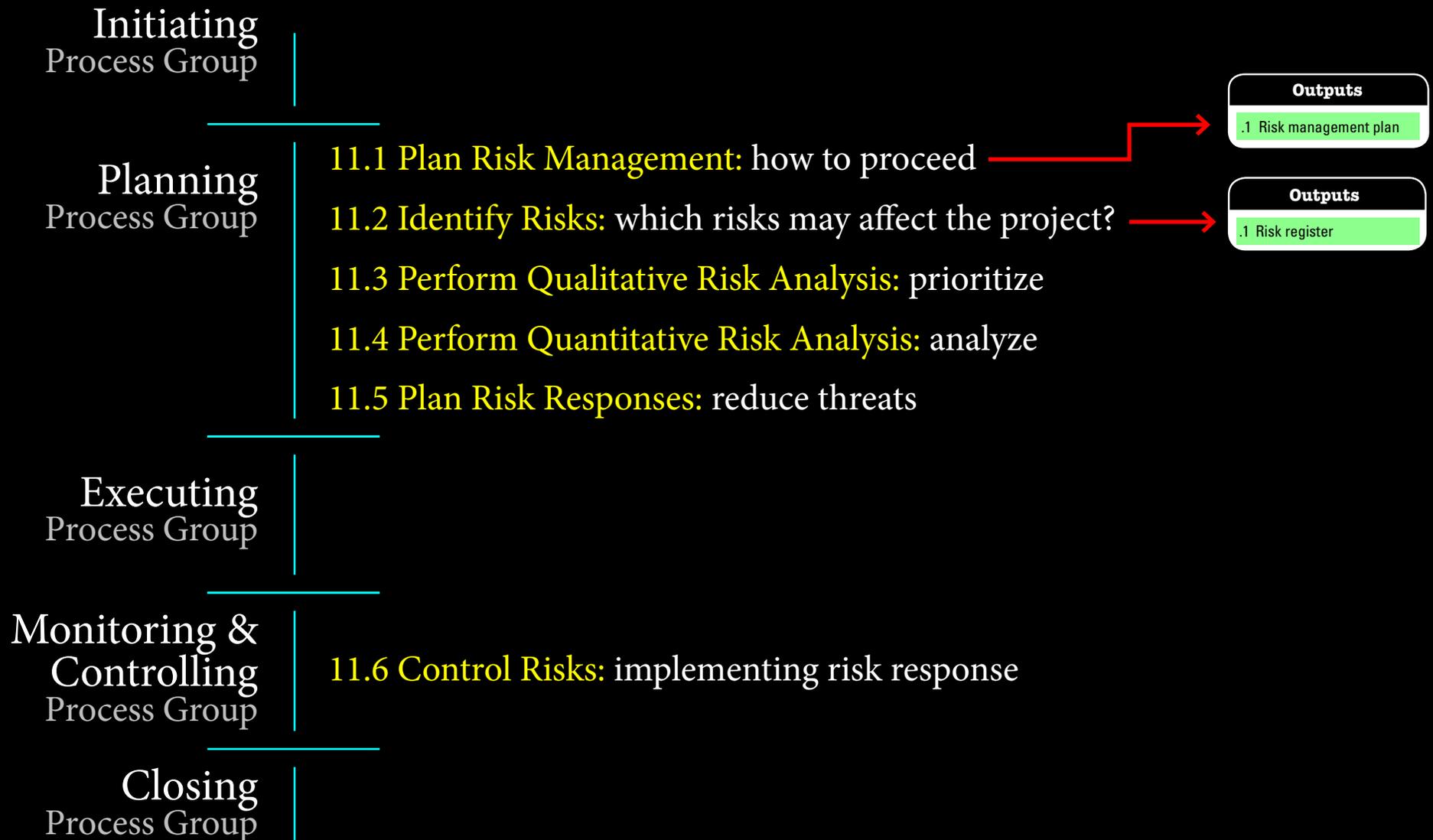
Risk categories

Exam:

The **risk register is an output of several of the risk management processes** and will have different information included depending on which process it is involved with

Read the questions carefully to understand which process the question is referring to

Project Risk Management



Today:

- 1) wbs & schedule presentation
- 2) flow chart presentation
- 3) status update presentation

where are you?

To Do:

-- Project Planning --

- 1) **Project Statement of Work**
- 2) **Project Charter**
- 3) **Stakeholder Register**

-- Project Scope Management --

- 1) **Scope Baseline** (WBS + WBS Dictionary)

-- Project Time Management --

- 1) **Activity list**
- 2) **Activity attributes**
- 3) **Milestone list**
- 4) **Activity duration estimate**
- 5) **Project schedule**

-- Project Cost Management --

- 1) **Estimate costs**

-- Project Quality Management --

- 1) **Quality Management Plan**

-- Project HR Management --

- 1) **HR Management Plan**

-- Project Communications Management --

- 1) **Communications Management Plan**

Time:

October							November							December							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
			1	2	3	4								1		1	2	3	4	5	6
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20	
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27	
26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31				
							30														

$$\begin{array}{r} @ 5\text{hr/day} = \\ 8 \\ 40 \end{array} + \begin{array}{r} 12 \\ 60 \end{array} = \begin{array}{r} 20 \text{ days} \\ 100 \text{ hours} \end{array}$$

To Do, Today: One-page progress report

Project Name:	Wayne Manor Server Installation	Project Manager:	Jason Todd	
Project Sponsor:	Bruce Wayne	Status Date:	2/9/2007	
Project Status:		Project Trend:		
Project Start:	1/8/2007	Project End:	8/31/2007	
			Days Remaining: 202	
Milestones		Baseline	Forecast	Achievements
Project Charter		1/22/2007	1/22/2007	Completed Initiate Toll Gate
Draft Schedule		2/5/2007	2/5/2007	Review Toll Gate Status with PMO and JLA
Initiate Toll Gate		2/6/2007	2/6/2007	Discuss high level requirements with Wayne Enterprises
Draft Plan		2/19/2007	3/2/2007	Secure project funding
Identify Resources		2/23/2007	3/2/2007	
Develop Schedule		3/9/2007	3/9/2007	
Baseline Schedule		3/12/2007	3/12/2007	
Plan Toll Gate		3/15/2007	3/15/2007	
Gather Requirements		3/30/2007	3/30/2007	
Draft Design Specs		4/13/2007	4/13/2007	
Review Design		4/27/2008	4/27/2008	
Approve Design		4/30/2007	4/30/2007	
Design Toll Gate		5/4/2007	5/4/2007	
Order Servers		5/7/2007	5/7/2007	
Install and Test Servers		7/31/2007	7/31/2007	
Construct Toll Gate		8/3/2007	8/3/2007	
Prep Cutover		8/17/2007	8/17/2007	
Launch Toll Gate		8/20/2007	8/20/2007	
Lessons Learned		8/24/2007	8/24/2007	
Close Gate		8/31/2007	8/31/2007	
				Issues
				Proect Plan and Resource tasks are late due to missing PM
				Unable to access floors beneath main library
				Risks
				Business customer attendance is a challenge
				Key Decisions and Change Requests
				Assign project to Richard Grayson
Technical Indicators			Next Steps	
Planned Tasks Complete	_____	SPI	_____	Complete project plan and identify resources
Actual Tasks Complete	_____	CPI	_____	Draft high level project schedule
Legend				
	Complete		At Risk	
	Late		On Schedule	

See the website for a link to this example

Q&A

Question

29. A new product development project has four levels in the work breakdown structure and has been sequenced using the precedence diagramming method. The activity duration estimates have been received. What should be done NEXT?
- A. Create an activity list.
 - B. Begin the work breakdown structure.
 - C. Finalize the schedule.
 - D. Compress the schedule.

Answer

29. **Answer D**

Explanation The question is really asking, “What is done after the Estimate Activity Durations process?” The work breakdown structure and activity list are done before Estimate Activity Durations. The schedule is not finalized until after schedule compression. Therefore compressing the schedule is done next.

Question

30. You are the project manager for a new product development project that has four levels in the work breakdown structure. The network diagram and duration estimates have been created, and a schedule has been developed and compressed. Which time management activity should you do NEXT?
- A. Control Schedule.
 - B. Estimate Activity Resources.
 - C. Analogously estimate the schedule.
 - D. Gain approval.

Answer

30. Answer D

Explanation Notice how this question and the previous one seem very similar. This is intended to prepare you for similar questions on the exam. Estimating activity resources and analogously estimating the schedule should have already been completed. The situation described is within the Develop Schedule process of time management. Control Schedule is the next time management process after Develop Schedule, but the Develop Schedule process is not yet finished. Final approval of the schedule by the stakeholders is needed before one has a project schedule.

Question

31. A team member from research and development tells you that her work is too creative to provide you with a fixed single estimate for the activity. You both decide to use the average labor hours to develop a prototype (from past projects). This is an example of which of the following?
- A. Parametric estimating
 - B. Three-point estimating
 - C. Analogous estimating
 - D. Monte Carlo analysis

Answer

31. **Answer A**

Explanation Monte Carlo analysis is a modeling, or simulation, technique. Three-point estimating uses three time estimates per activity. One could use data from past projects to come up with the estimate (analogous estimating), but the best answer is parametric estimating because past history is being used to calculate an estimate.

Question

32. An activity has an early start (ES) of day 3, a late start (LS) of day 13, an early finish (EF) of day 9, and a late finish (LF) of day 19. The activity:
- A. Is on the critical path.
 - B. Has a lag.
 - C. Is progressing well.
 - D. Is not on the critical path.

Answer

32. **Answer** D

Explanation There is no information presented about lag or progress. The activity described has float, because there is a difference between the early start and late start. An activity that has float is probably not on the critical path.

Question

33. The project is calculated to be completed four days after the desired completion date. You do not have access to additional resources. The project is low risk, the benefit cost ratio is expected to be 1.6, and the dependencies are preferential. Under these circumstances, what is the BEST thing to do?
- A. Cut resources from an activity.
 - B. Make more activities concurrent.
 - C. Move resources from the preferential dependencies to the external dependencies.
 - D. Remove an activity from the project.

Answer

33. Answer B

Explanation Cutting resources from an activity would not save time, nor would moving resources from the preferential dependencies to the external dependencies. Removing an activity from the project is a possibility, but since the dependencies are preferential and the risk is low, the best choice is to make more activities concurrent, as this would have less impact on the project.

Question

34. A project manager for a small construction company has a project that was budgeted for US \$130,000 over a six-week period. According to her schedule, the project should have cost US \$60,000 to date. However, it has cost US \$90,000 to date. The project is also behind schedule, because the original estimates were not accurate. Who has the PRIMARY responsibility to solve this problem?
- A. Project manager
 - B. Senior management
 - C. Project sponsor
 - D. Manager of the project management office

Answer

34. **Answer** A

Explanation Did you get lost looking at all the numbers presented in this question? Notice that there are no calculations required, simply an understanding of what the problem is. This question describes schedule management, which is a responsibility of the project manager.

Question

35. Senior management is complaining that they are not able to easily determine the status of ongoing projects in the organization. Which of the following types of reports would help provide summary information to senior management?
- A. Detailed cost estimates
 - B. Project management plans
 - C. Bar charts
 - D. Milestone reports

Answer

35. Answer D

Explanation Detailed cost estimates have nothing to do with the situation described. Project management plans include more detail than is necessary for the situation described, and may distract from the conversation if used in this situation. Bar charts are most effective for reporting to the team. The best answer is milestone reports, which present the right level of detail for upper management.

Question

36. Rearranging resources so that a constant number of resources is used each month is called:
- A. Crashing.
 - B. Floating.
 - C. Leveling.
 - D. Fast tracking.

Answer

36. **Answer C**

Explanation The key to this question is the phrase “constant number used each month.” Only leveling has such an effect on the schedule.

Question

37. Which of the following is a benefit of an analogous project estimate?
- A. It will be closer to what the work will actually require.
 - B. It is based on a detailed understanding of what the work requires.
 - C. It gives the project team an understanding of management's expectations.
 - D. It helps the project manager determine if the project will meet the schedule.

Answer

37. Answer C

Explanation Remember that analogous project estimates are considered to be top-down, high-level estimates. Therefore, they are not based on a detailed understanding of what the work will require. The project manager needs more than an analogous (high-level) estimate to determine whether or not the project will meet the schedule. The benefit of an analogous project estimate is that it is management's expectations of how long the project will take. Any differences between the analogous estimate and the detailed bottom-up estimate can be reconciled in the planning processes.

Question

38. During project executing, a large number of changes are made to the project. The project manager should:
- A. Wait until all changes are known and print out a new schedule.
 - B. Make approved changes as needed, but retain the schedule baseline.
 - C. Make only the changes approved by management.
 - D. Talk to management before any changes are made.

Answer

38. Answer B

Explanation Waiting until all changes are known, and then printing out a new schedule, is a common error many project managers make. Instead, the project manager should be controlling the project throughout its completion. The situation in the question does not provide a reason to believe the schedule baseline must be changed. A project manager must be in control of the project, rather than consulting with management before making any changes. Whenever a large number of changes occur on a project, it is wise to confirm that the business case, as stated in the project charter, is still valid.

Kwaheri

(Swahili)