



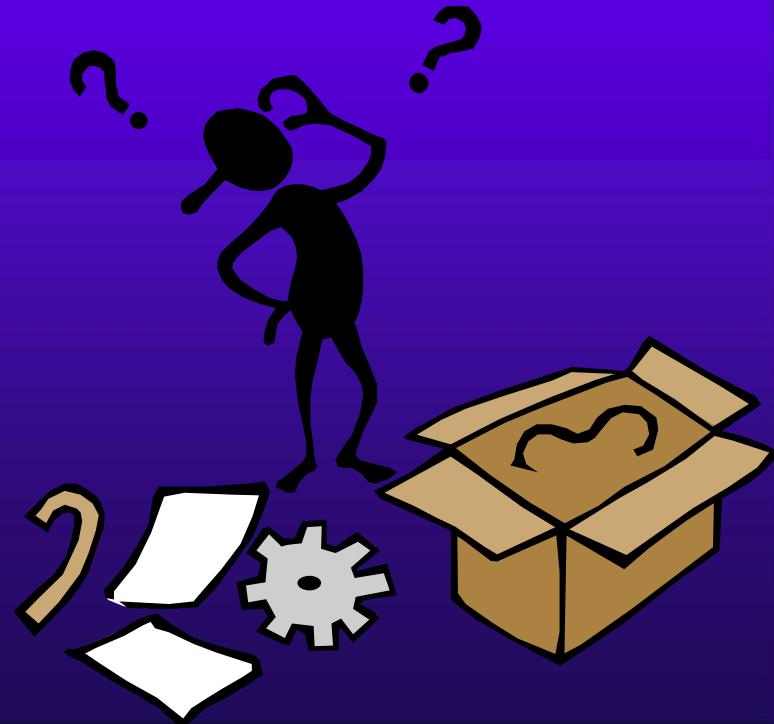
Risk Response Planning

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Definition

The process of developing options, and determining actions to enhance opportunities and reduce threats to the projects objectives.



Risk Response Planning and Development

- Strategies available
 - Three typically deal with negative impacts
 - Avoidance
 - Transference
 - Mitigation
 - Three typically deal with positive impacts
 - Exploitation
 - Share
 - Enhancement



Risk Response Planning and Development

- Strategies available (cont.)
 - For both Threats and Opportunities
 - Acceptance



- Contingent Response



Strategies for Negative Risks or Threats

Avoidance

Change the Project management plan

- Eliminate the threat
- Isolate the project objectives from the impact
- Relax the objective that is in jeopardy
 - Extended schedule
 - Reduce scope

Clarify requirements, gather more information, improve communication, or acquire more expertise – take steps to avoid the risk!



Strategies for Negative Risks or Threats



Transference

Shift the threat along with ownership to a third party

- Does not eliminate it
- Insurance – pay a risk premium (mostly dealing with financial risk)

Some examples: Insurance, performance bonds, warranties, guarantees, and contracts

Contracts – cost type - transfer cost risk to buyer

Fixed price – transfer risk to seller

Strategies for Negative Risks or Threats

Mitigation

Reduce the probability and/or impact to an acceptable threshold.

This is done early and is more effective than responding to the risk after it occurs.

Ways to Mitigate: Adopting less complex processes, conducting more tests, choosing a more stable supplier, prototype development (make sure it works), redundancy





General Risk Mitigation

Technical Risk	Cost Risk	Schedule Risk
Emphasize team support and avoid stand-alone project structure	Increase the frequency of project monitoring	Increase the frequency of project monitoring
Increase project manager authority	Use WBS and CPM	Use WBS and CPM
Improve the frequency of project monitoring	Improve communication, project goals understanding, and team support	Select the most experienced project manager
Improve problem handling and communication	Increase project manager authority	
Use WBS and CPM		

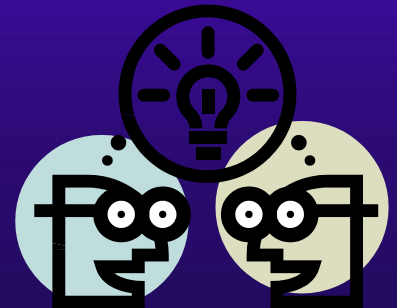
Strategies for Positive Risks or Opportunities

Exploitation

Where organizations want to make sure the opportunity is realized.

This seeks to eliminate the uncertainty associated with an upside event allowing it to happen and make sure it is capitalized on.

Do this by: assigning more talented resources or provide for better quality than originally planned for.



Strategies for Positive Risks or Opportunities

Share

Allocating ownership to a third party who is best able to capture the opportunity for the benefit of the project.

Ex: form risk sharing partnerships, teams, special-purpose companies, and joint ventures to handle specific opportunities

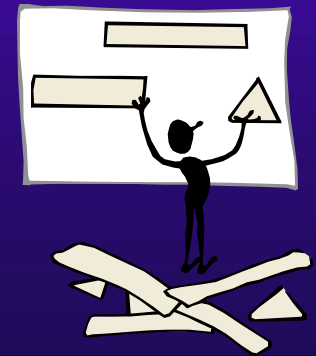


Strategies for Positive Risks or Opportunities

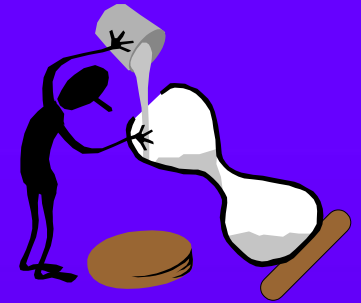
Enhancement

Modify size of the opportunity by increasing the probability and/or positive impacts and by identifying and maximizing key drivers of these impacts.

EX: facilitate or strengthen the cause, proactively target and reinforce the trigger conditions, this could increase probability



Risk Response Planning



- Consider each risk and develop a strategy to manage that risk.
- Avoidance strategies
 - The probability that the risk will arise is reduced;
- Minimisation strategies
 - The impact of the risk on the project or product will be reduced;
- Contingency plans
 - If the risk arises, contingency plans are plans to deal with that risk;



Strategy Examples to help manage risk

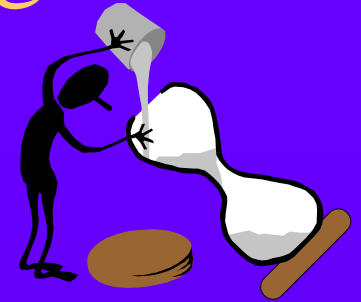
Risk	Strategy
Organizational financial problems	Prepare a briefing document for senior management showing how the project is making a very important contribution to the goals of the business and presenting reasons why cuts to the project budget would not be cost-effective.
Recruitment problems	Alert customer to potential difficulties and the possibility of delays; investigate buying-in components.
Staff illness	Reorganize team so that there is more overlap of work and people therefore understand each other's jobs.
Defective components	Replace potentially defective components with bought-in components of known reliability.
Requirements changes	Derive traceability information to assess requirements change impact; maximize information hiding in the design.



Strategy Examples to help manage risk (cont.)

Risk	Strategy
Organizational restructuring	Prepare a briefing document for senior management showing how the project is making a very important contribution to the goals of the business.
Database performance	Investigate the possibility of buying a higher-performance database.
Underestimated development time	Investigate buying-in components; investigate use of a program generator.

Risk Response Planning and Development



Acceptance

- Adopted because it is seldom possible to eliminate all risk.
- No plan changes made
- Unable to identify any other suitable response strategy
- Can be for either positive or negative
- Passive or active
 - Passive – no action leaves the team to deal with it as it occurs
 - Active – most common is a contingency reserve including time or money or resources to handle knowns and unknowns



Risk Response Planning and Development

Contingent Response

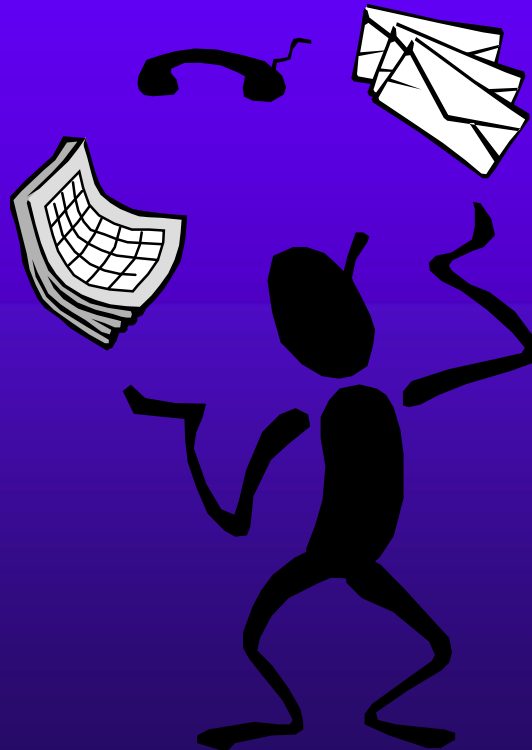
This is a response to one event that is only put into play if a defined trigger goes off and only works for predefined conditions.

Ex: missed milestones or priority change



Summary


So what do we do with this?





Risk Response Outputs

- Risk Register Updates
 - Agreed upon response strategies
 - Specific actions to implement the chosen response strategy
 - Symptoms and warning signs of risks occurrence
 - Budget and schedule requirements if implemented
 - Contingency reserves with identified risk tolerances
 - Contingency plan triggers
 - Fallback plans
- Project plan updates
- Risk related contractual agreements



Team work (for course project)

Based upon the project you are going to develop and risk management templates documents, each team will do:

- **Risk identification (register)**
- **Risk analysis**
- **Risk assessment**
- **Risk response plan**



Team work

Some hints for your work:

- **Using the ordinal-scaled measures discussed in the class, analyze the probability and severity for all of the identified risks**
- **Prioritize the risks in the risk register**
- **Using the risks in the risk register (check list) and making risk response plan for the top 6 ones**

Questions?

