

Risk Management

Prepared by Dr. Dalia Hosni

Lecture2



MGM 510

Risk Management



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Concept of Risk Management

- ☐ Protect the organizations assets
- ☐ Focus on all risks to an organization
- ☐ Aligned with organization mission ,vision , value, and goals

- Plan Risk Management
- Identify Risks
- Perform Qualitative Risk Analysis
- Perform Quantitative Risk Analysis
- Plan Risk Responses
- Monitor and Control Risks



Risk

An unplanned or uncertain
event that can impact a
project

**What is a
Risk?**



Risk

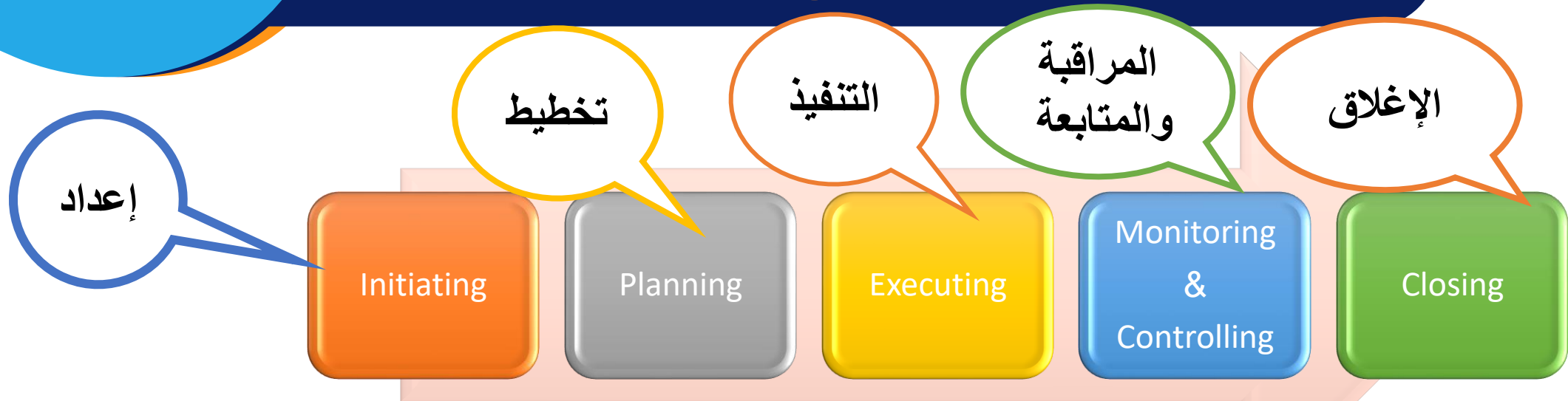
A risk is any uncertain event or condition that might affect your project. Not all risks are **negative**. Some events (like finding an easier way to do an activity) or conditions (like lower prices for certain materials) can help your project. When this happens, we call it an **opportunity**; but it's still handled just like a

**What is a
Risk?**



Lecture 02

Risk Management



- Plan Risk Management
- Identify Risks
- Perform Qualitative Risk Analysis
- Perform Quantitative Risk Analysis
- Plan Risk Responses

Monitor and
Control Risks

A risk management plan defines how your project's risk management process will be executed. That includes the funds, tools and approaches that will be used to perform risk identification, assessment, mitigation and monitoring activities

Risk Management Plan

A risk management plan usually includes:

Methodology

Risk Register

Risk Breakdown
Structure

Risk Assessment
Matrix

Risk Response
Plan

Roles and
responsibilities

Funding

Timing

❑ **Methodology:** Define the tools and approaches that will be used to perform risk management activities such as risk assessment, risk analysis and risk mitigation strategies.

❑ **Risk Register:** A **risk register** is a chart where you can document all the risk identification information of your project.

- ❑ **Risk Breakdown Structure:** It's a chart that allows you to identify risk categories and the hierarchical structure of project risks.

- ❑ **Risk Assessment Matrix:** A risk assessment matrix allows you to analyze the likelihood and the impact of project risks so you can prioritize them.

- ❑ **Risk Response Plan:** A **risk response plan** is a project management document that explains the risk mitigation strategies that will be employed to manage your project risks.

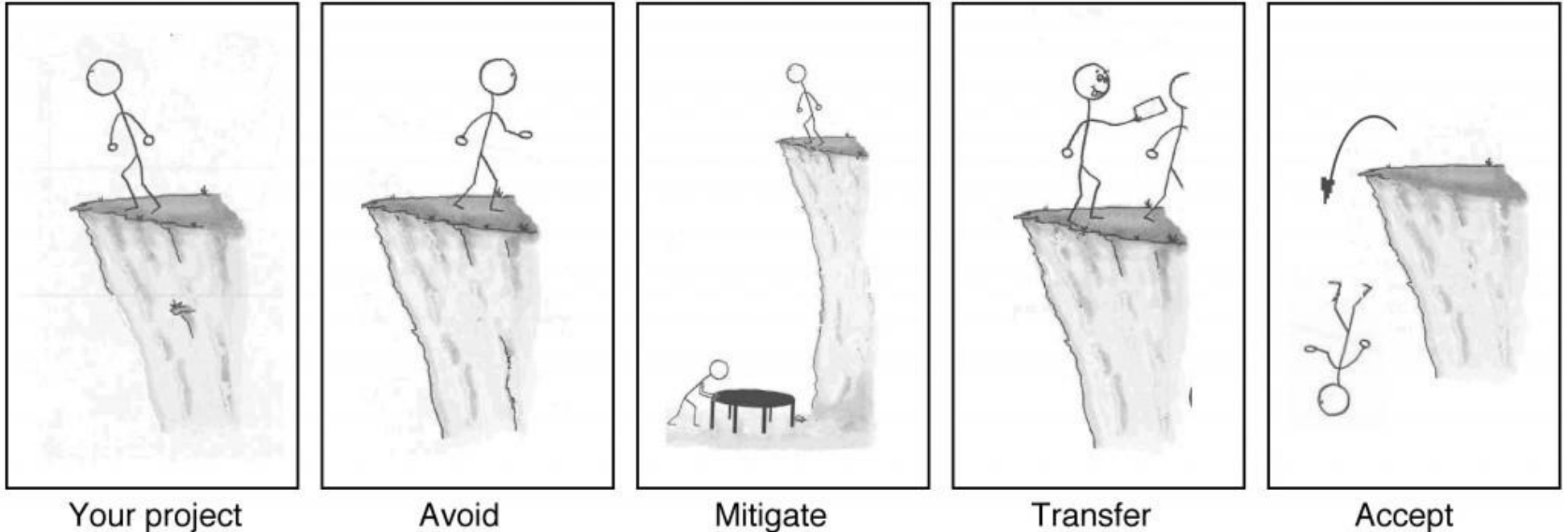
- ❑ **Roles and responsibilities:** The risk management team members have responsibilities as risk owners. They need to monitor project risks and supervise their risk response actions.

☐ **Funding:** Have a section where you identify the funds required to perform your risk management activities.

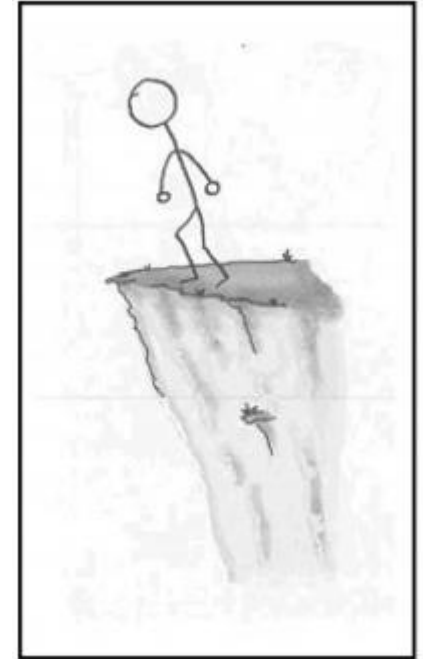
- ❑ **Timing:** Include a section to define the schedule for the risk management activities.

Risk Management Planning

If your project requires that you stand on the edge of a cliff, then there's a risk that you could fall. If it's very windy out or if the ground is slippery and uneven, then falling is more likely

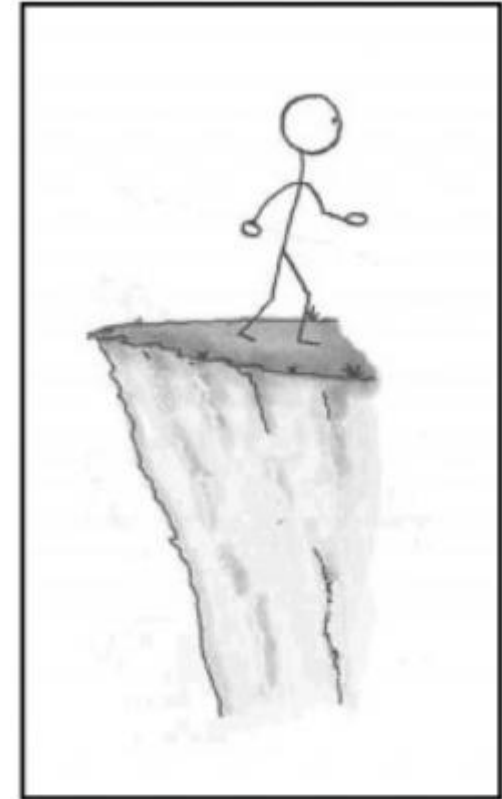


When you're planning your project, risks are still uncertain: they haven't happened yet. But eventually, some of the risks that you plan for do happen, and that's when you have to deal with them. There are four basic ways to handle a risk.



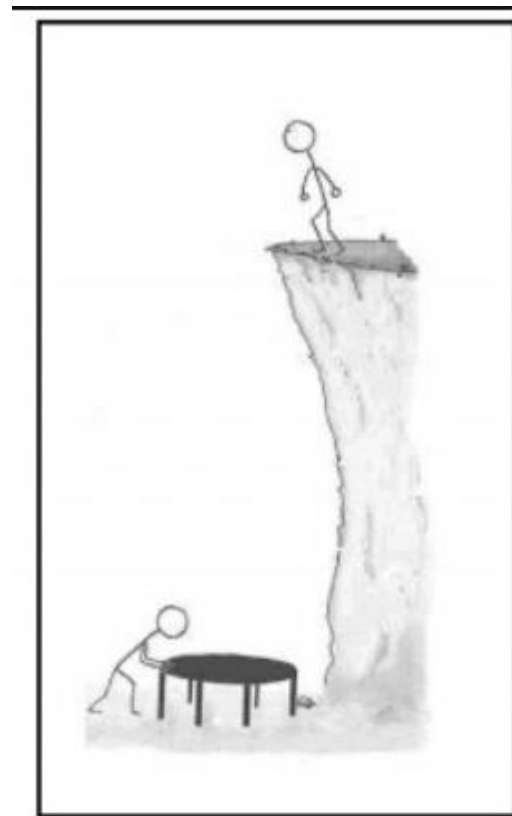
Your project

1.Avoid: The best thing you can do with a risk is avoid it. If you can prevent it from happening, it definitely won't hurt your project.



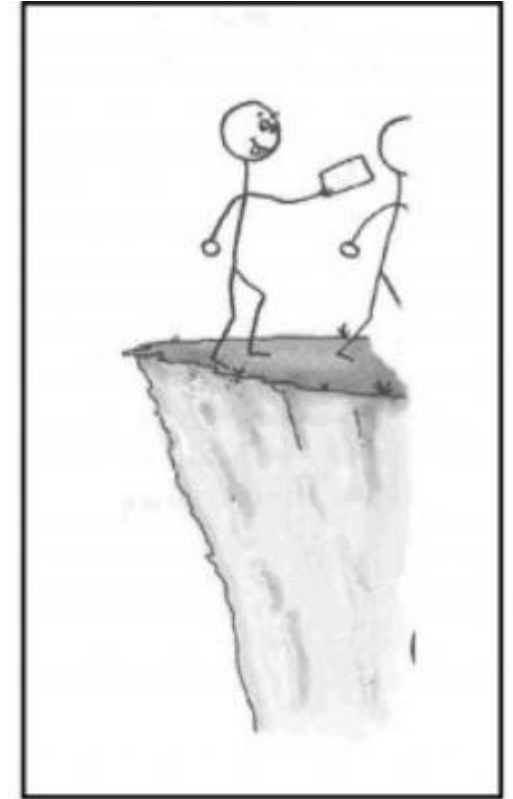
Avoid

2. Mitigate: If you can't avoid the risk, you can mitigate it. This means taking some sort of action that will cause it to do as little damage to your project as possible.



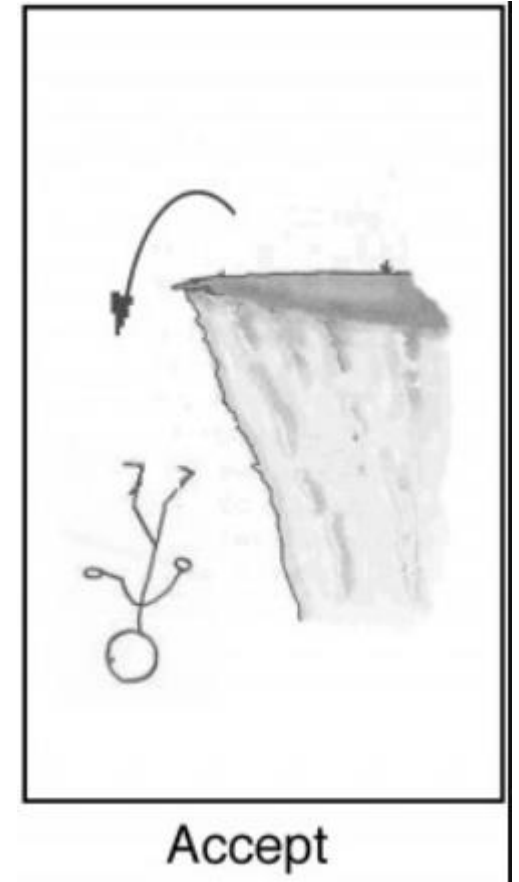
Mitigate

3.Transfer: One effective way to deal with a risk is to pay someone else to accept it for you. The most common way to do this is to buy insurance.

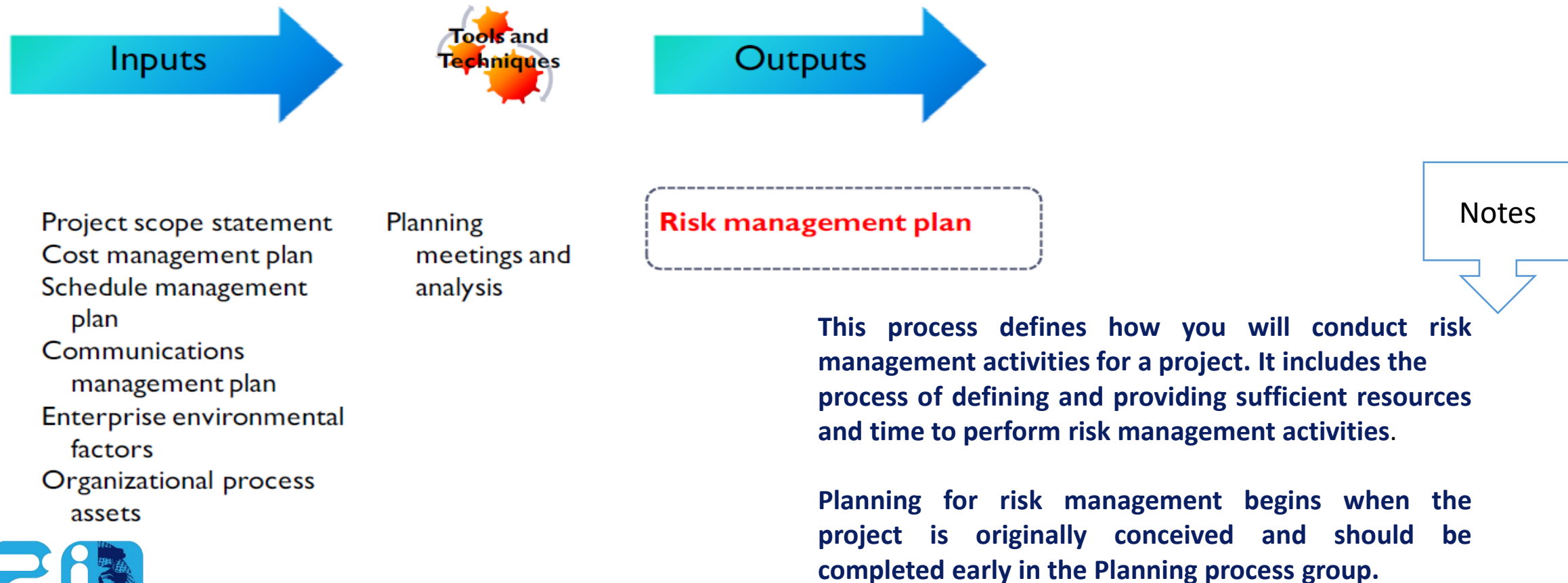


Transfer

4. Accept: When you can't avoid, mitigate, or transfer a risk, then you have to accept it. But even when you accept a risk, at least you've looked at the alternatives and you know what will happen if it occurs. If you can't avoid the risk, and there's nothing you can do to reduce its impact, then accepting it is your only choice.



By the time a risk actually occurs on your project, it's too late to do anything about it. That's why you need to plan for risks from the beginning and keep coming back to do more planning throughout the project.



Components Include:

- Methodology
- Roles and responsibilities
- Budgeting
- Timing
- Risk categories
- Definitions of probability and impact
- Stakeholder tolerances
- Reporting formats
- Tracking

Which Define:

- How you will do risk management
- Who will do what
- What risk. Will cost
- When we do risk.
- **Example** internal, external
- Will it happen and how severe the risk may be
- Risk tolerant or risk averse
- What goes into the report
- Audit of risk process

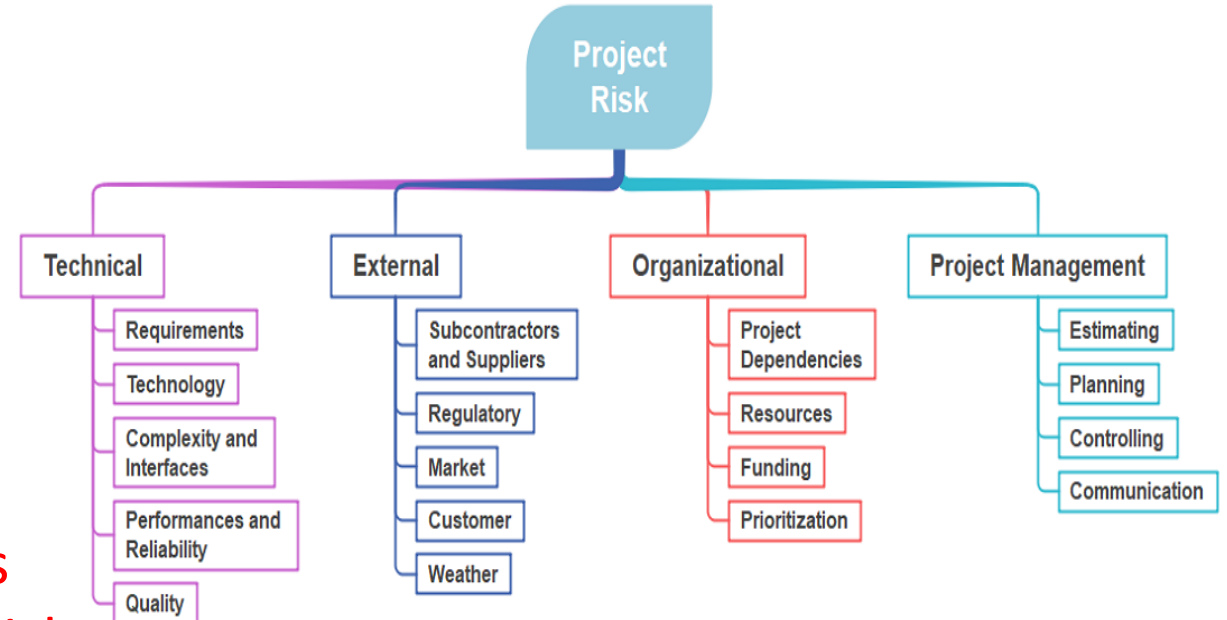
The Risk Management Plan

The output of the Plan Risk Management process is the creation and completion of the Risk Management Plan. The major categories in a risk management plan include:

- Risk management methodology
- roles and responsibilities
- Budgeting
- Timing
- Risk Categories
- Definitions of probability and impact
- Probability and impact matrix
- Revised stakeholder's tolerances
- Reporting Formats
- Tracking

The risk categories in a project management plan can be graphically represented with a tool that is similar to the work breakdown structure (WBS) called a Risk Breakdown Structure (RBS).

The **RBS** enables you to see all project risks grouped by basic themes and the specific risk areas occurring in relation to each theme



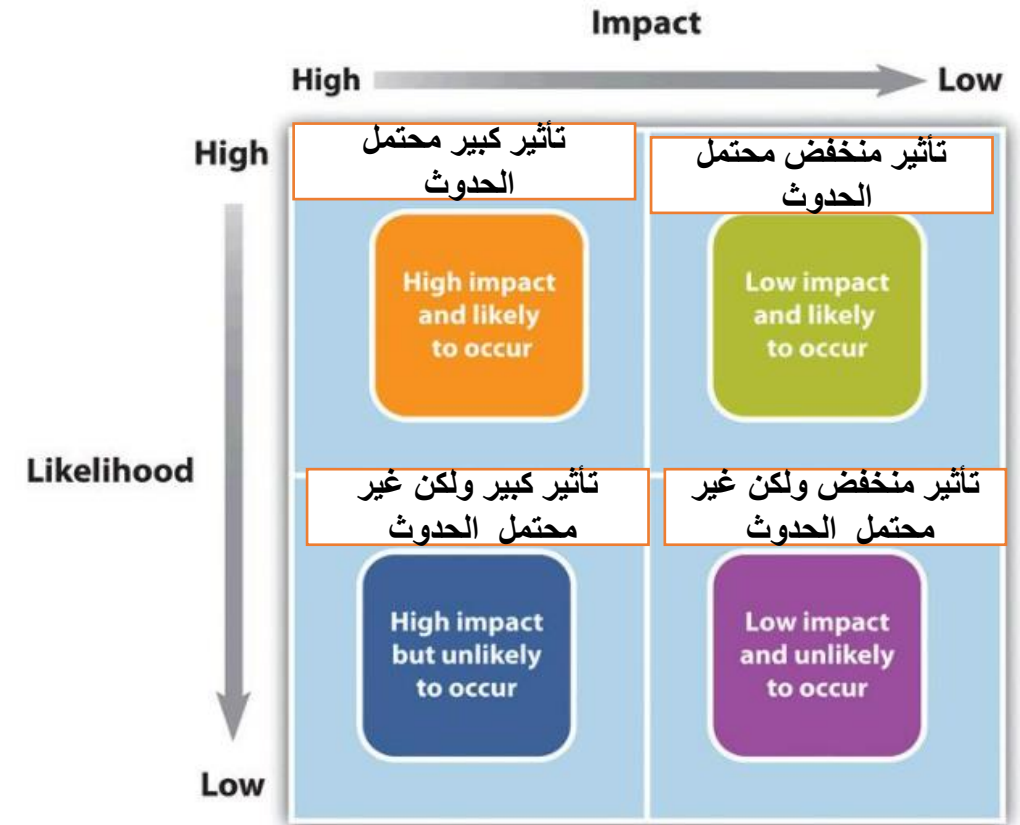
Risk identification is the process of identifying and assessing threats to an organization, its operations, and its workforce. For example, risk identification may include assessing IT security threats such as malware and ransomware, accidents, natural disasters, and other potentially harmful events that could disrupt business operations. Companies that develop robust risk management plans are likely to find they're able to minimize the impact of threats, when and if they should occur.

There are five core steps within the risk identification and management process. These steps include risk identification, risk analysis, risk evaluation, risk treatment, and risk monitoring.

1.Risk Identification: The purpose of risk identification is to reveal what, where, when, why, and how something could affect a company's ability to operate. For example, a business located in central California might include "the possibility of wildfire" as an event that could disrupt business operations.

2. Risk Analysis: This step involves establishing the probability that a risk event might occur and the potential outcome of each event. Using the California wildfire example, safety managers might assess how much rainfall has occurred in the past 12 months and the extent of damage the company could face should a fire occur.

3. Risk Evaluation: Risk evaluation compares the magnitude of each risk and ranks them according to prominence and consequence. For example, the effects of a possible wildfire may be weighed against the effects of a possible mudslide. Whichever event is determined to have a higher probability of happening and causing damage, it would rank higher.



4. **Risk Treatment:** Risk treatment is also referred to as Risk Response Planning. In this step, risk mitigation strategies, preventative care, and contingency plans are created based on the assessed value of each risk. Using the wildfire example, risk managers may choose to house additional network servers offsite, so business operations could still resume if an onsite server is damaged. The risk manager may also develop evacuation plans for employees.
5. **Risk Monitoring:** Risk management is a non-stop process that adapts and changes over time. Repeating and continually monitoring the processes can help assure maximum coverage of known and unknown risks.

This Process is used to determine which risks may affect the project, and can include the following resources when performing risk identification activities:

- Project Manager
- Project Team
- Risk Team
- Stakeholders
- Customers
- Subject matter experts