

A **Risk Assessment Matrix** (also known as a Risk Matrix or Risk Heat Map) is a tool used to evaluate and prioritize risks based on their **likelihood** and **impact**. The key components of a risk assessment matrix are:

✓ Key Components of a Risk Assessment Matrix:

1. Risk Identifier

- A unique ID or name for each identified risk.
- Helps in referencing and tracking risks.

2. Risk Description

- A brief explanation of the risk, including its cause and potential effect.

3. Likelihood (Probability)

- The estimated frequency or probability of the risk occurring.
- Often categorized as:
 - Very Low / Rare
 - Low / Unlikely
 - Medium / Possible
 - High / Likely
 - Very High / Almost Certain

4. Impact (Severity)

- The potential consequence or effect if the risk occurs.
- Often categorized as:
 - Negligible
 - Minor
 - Moderate
 - Major
 - Critical / Catastrophic

5. Risk Rating / Score

- A combination of likelihood and impact, often calculated as:

$$\text{Risk Score} = \text{Likelihood} \times \text{Impact}$$

- Usually represented on a color-coded grid (e.g., green, yellow, red) to indicate priority.

6. Risk Category

- Groups similar risks together (e.g., technical, operational, financial, legal, environmental).

7. Mitigation Strategies / Controls

- Actions to reduce the likelihood or impact of the risk.

8. Risk Owner

- The person or team responsible for monitoring and addressing the risk.

9. Status / Comments

- Current status of the risk (e.g., open, mitigated, closed) and any additional notes.