

Risk Analysis

EPICS pre-read Fall 2016

Risk analysis includes:

- Identifying risk
- Assessing risk
- A plan to mitigate risk

Identifying risk:

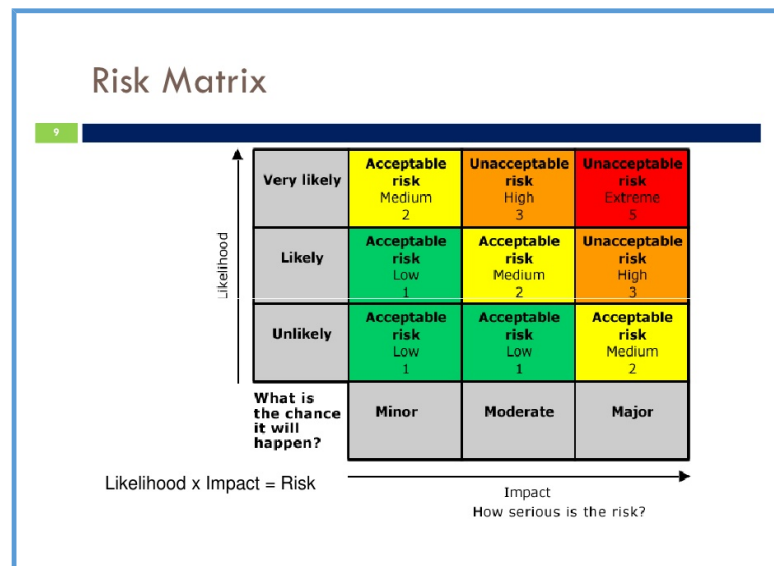
1. Brainstorm every possible thing that can go wrong. Multiple heads thinking on it yields much better results. Remember the rules of brainstorming.
2. Reverse brainstorm: overturn your actual goal and brainstorm again. Instead of “how can we delight the customer with this solution?” ask “how can we injure the customer?”
3. Consider multiple scenarios; ask “what if...?”
4. Consider multiple stakeholders’ perspectives.
5. Consider the entire lifecycle of the solution or process in question.

Assessing risk:

Risk is a product of the probability (P) (or likelihood) something will happen, times the impact (I) of the event if it does happen.

$$\text{Risk} = P \times I$$

The matrix on the right shows how to plot potential risks, in order to assess how tolerable each risk is.



Mitigating risk:

Low overall risk events (pictured in green) do not need mitigation or elimination.

Red risks need a lot of planning to offset either the impact or the probability.

Orange and Yellow risks should also receive attention to avert the possibility of problems in a risk mitigation plan.

When creating your risk mitigation plan, consider how to reduce both/either the potential IMPACT and/or the probability. Suggest the best option.