

Process Decision Program Chart (PDPC)

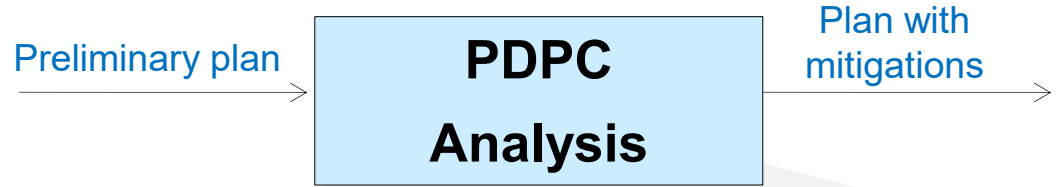
Problem

How to anticipate and mitigate potential problems?

Difficulty

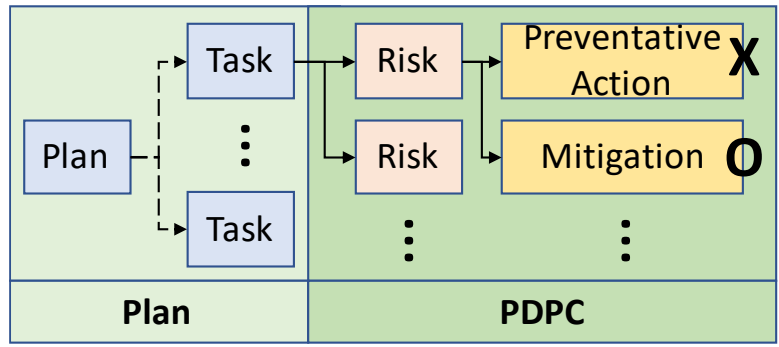
Easy to use

- A **Process Decision Program Chart (PDPC)** is a risk identification and mitigation tool.
- PDPC starts with a tree diagram representation of a program plan and systematically identifies risks by asking “what if” questions.
- Using PDPC, you can revise the plan or prepare mitigations.

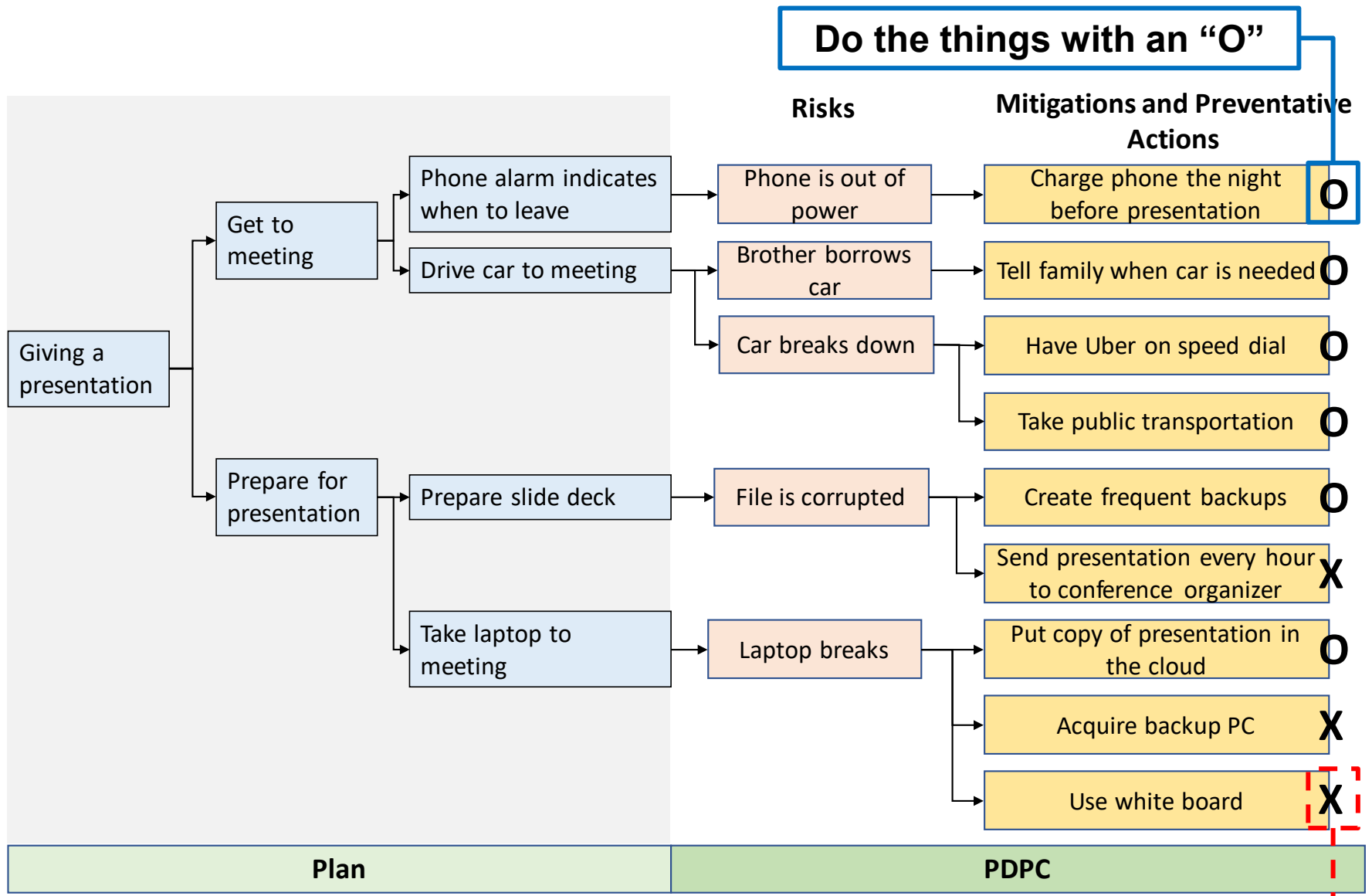


1. Create a tree diagram for a program plan.
 - Do not make it overly complex.
 - Perhaps, 3 layers to the task level.
2. For each task, identify what can go wrong using brainstorming. Address, perhaps:
 - How could this task fail?
 - Are the assumptions reasonable?
 - Is there margin for error?
3. Add each identified risk to the tree.
4. For each identified risk, brainstorm mitigations and preventative actions.
5. Add each of them to the tree.
6. Evaluate each mitigation:
 - How easily can it be implemented?
 - How effective is it?

Label each mitigation with an “O” if it is practical, or with an “X” if it is not.



PDPC – Example – Giving a 6in6 presentation



Don't do things with an "X"

PDPC – Notes

Slide 1

1. PDPC is similar to FMEA (Failure Modes and Effects Analysis). Usually, FMEA is applied to a process while PDPC is applied to a project.
2. PDPC is a much simpler tool to use than FMEA, since FMEA is quantitative.
3. Possible questions for use with PDPC to identify risks:
 - Could the assumptions be incorrect regarding: Inputs? Outputs? Performance by others?
 - How likely is it that new information will change the plan?
 - What parts of the plan can, or cannot, be changed?
 - Is there a reasonable margin for error?
 - What lessons have been learned from similar projects?

Slide 2

1. It is easy to brainstorm many possible failure modes, only some are shown for the given example.
2. After determining which mitigations are practical, a useful subset should be implemented.