# FLOW SYSTEM

## PARTICIPANT WORKBOOK

### Team Science

## Workbook: Red Teaming

getflowtrained.com/playbook/red-teaming/

# Red Teaming

Red teaming is rooted in cognitive science and the psychology of decision-making.

Red teaming helps improve and shape our individual and collective orientation.

Red teaming helps individuals and organizations hedge against surprises, biases, and inexperience.

Benefits from red teaming techniques include

- Developing a broader understanding of one's environment
- Identification of vulnerabilities
- Detection of weak signals
- Reduction of risks
- Enhanced performance
- Critique of a plan or strategy
- Development of contingency plans
- Improved decision-making skills

In the following exercise you will be guided through one of the red teaming techniques, the *premortem analysis*. The premortem analysis is a red teaming technique that aids the decision-making process by introducing potential vulnerabilities. Premortem analysis is conducted prior to making the decision. The following steps from UFMCS (2018) will guide you through a premortem analysis:

| Premortem Analysis | |
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| **Step 1**: Preparation | All members should be familiar with the potential decision. |

| Premortem Analysis (cont.) | |
|---|---|
| **Step 2**: Imagine a fiasco | Imagine the decision failed. Ask:<br>Why did this decision fail?<br>What could have caused this?<br>Specifically, what are the reasons? |
| **Step 3**: Generate the reasons for failure | Participants individually spend several minutes writing down all the possible reasons for failure. It is important to do this individually first, so that the insights and experience of each participant are brought to bear. |
| **Step 4**: Consolidate the lists | Go around the room in round-robin fashion and solicit input from participants, one at a time. Record the ideas on a whiteboard or poster paper. Continue until all ideas are exhausted. This is a divergent process in which four rules must be followed: |
| Rule 1 | The more ideas, the better. |
| Rule 2 | Build one idea upon another. In other words, if someone else's idea prompts a new one from you, write it down. |
| Rule 3 | Wacky ideas are okay. This rule bothers most people. Conventional wisdom dictates that new ideas must be sensible, reasonable, constructive, and practical. Wacky, silly, and foolish are subjective modifiers that people tend to apply to any idea that does not conform narrowly to a risk-free standard of sensible, reasonable, constructive, or practical. Although wacky ideas may seem foolish, they can generate serious thought. |
| Rule 4 | Don't evaluate ideas, neither yours nor someone else's. This includes body language, eye rolls, nods, or groans. This rule liberates people from their self-imposed restraints in generating ideas and eliminates fear of criticism and ridicule. |
| **Step 5**: Revisit the plan | Based on the list of concerns, revisit the plan and determine what to mitigate. Determine ownership and develop concepts for modifications to the plan. |
| **Step 6**: Keep and periodically review the list | This helps keep the possibility of different types of failure fresh in everyone's mind as the plan develops or is implemented. |

(UFMCS, 2018, pp. 173–174)

## Connect the Three Helixes:

Flow can only be achieved when the three helixes are interconnected. To identify how this could occur, the next exercise requires the reader to identify examples of different methods from each of the other two helixes (complexity thinking, distributed leadership) that will support red teaming. Knowledge of all three helixes will be required to make these connections.


| Connect the Helixes | |
|---|---|
| Select a scenario or problem that would benefit from red teaming. | |
| Identify three methods from complexity thinking that could work with red teaming. Give a brief description about how they complement one another. | |
| CT Method 1: | |
| CT Method 2: | |
| CT Method 3: | |

| Connect the Helixes | |
|---|---|
| Identify three methods from the distributed leadership helix that could work with or support red teaming. Give a brief description about how they complement one another. | |
| DL Method 1: | |
| DL Method 2: | |
| DL Method 3: | |
| Provide a description explaining which methods from each of the three helixes (with red teaming being the TS method) work best for the scenario/problem identified earlier. | |