

CAUSE & EFFECT DIAGRAM

Purpose

A Cause and Effect diagram helps analyse the potential causes of a problem or issue. It is also called a fishbone diagram because of the way it looks or a Ishikawa diagram, named after its inventor. It is used to show all possible root causes of a problem in a simple diagram.

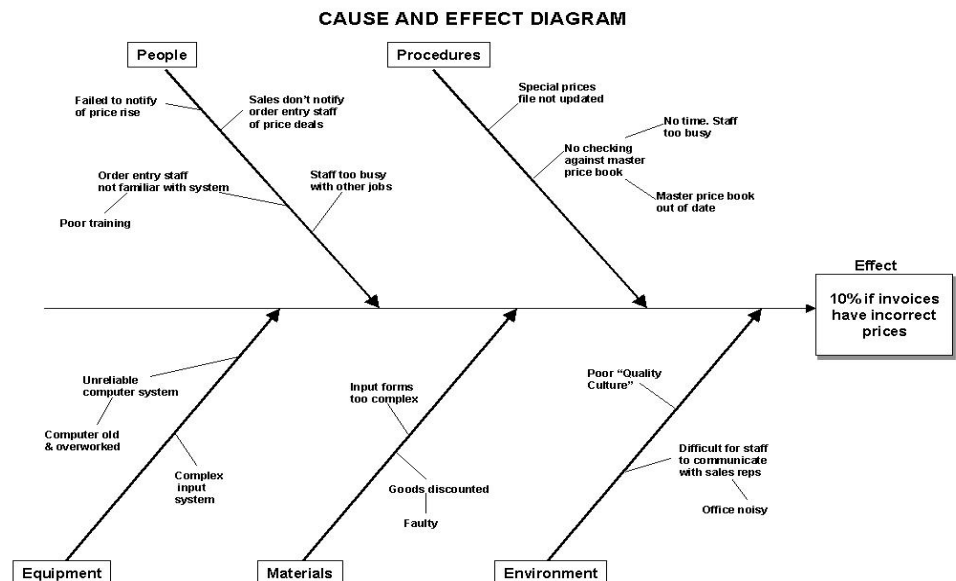
When to Use it

When the root causes of a problem need to be determined.

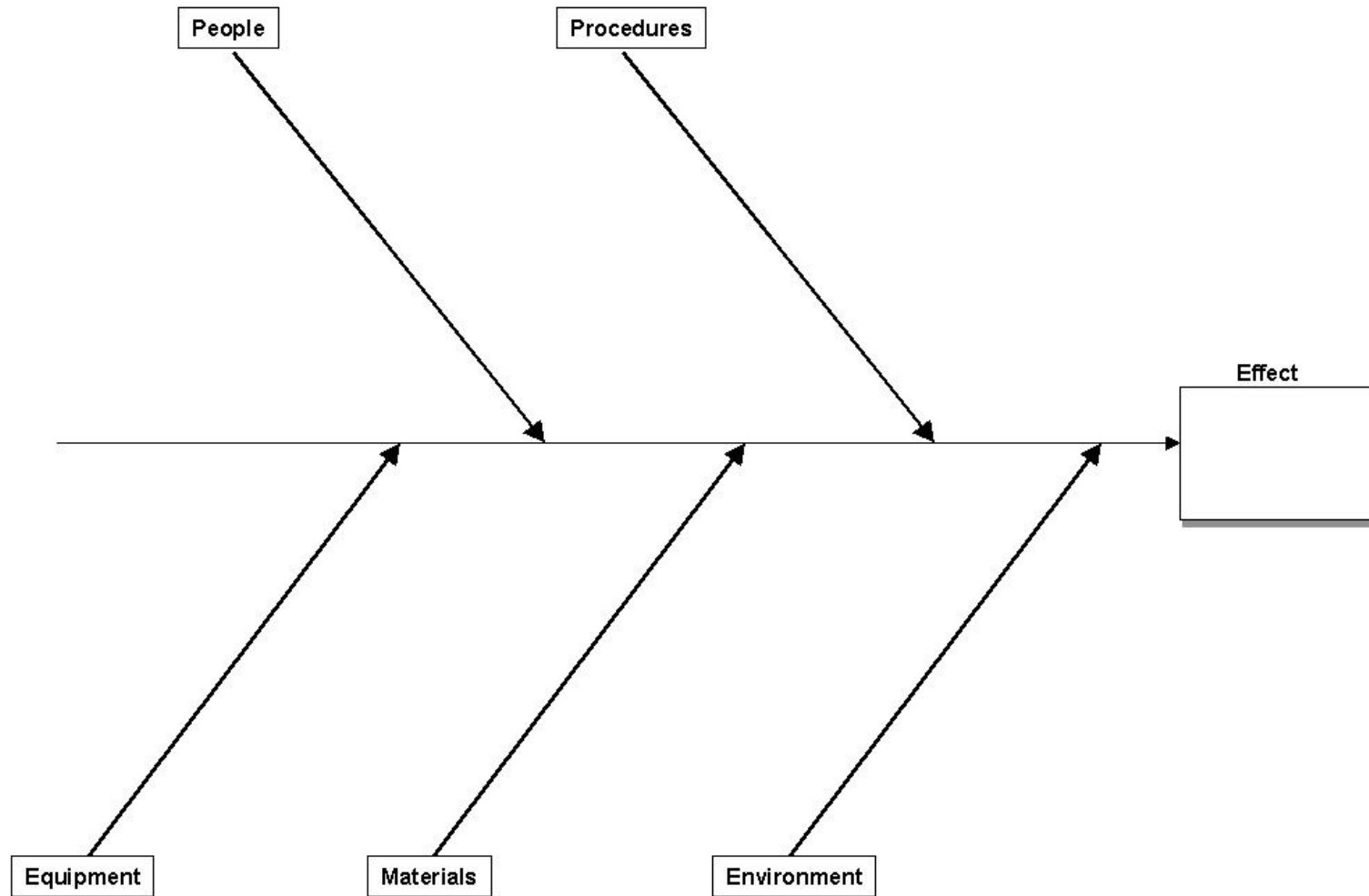
How to Use it

- Draw the basic diagram:**
Photocopy the blank diagram on the following page or transfer it to a whiteboard or piece of butchers paper.
- Define the problem:**
Define the problem (or effect), *in neutral & factual terms*, and write it in the box on the right hand side of the diagram.
- Define the major categories of causes:**
Most causes in organisational problems can be grouped into People, Procedures, Equipment, Materials and Environment.
- Brainstorm:**
Brainstorm causes as a team and list them in their categories; show the causes as joining onto the major arrows (categories). Build on each other's ideas and look for causes by asking "Why" about every cause put onto the diagram. Ask "Why" at least five times.
- Agree the most likely causes:**
Discuss and identify the most likely causes. Rank the list in order of likelihood.
- Verify likely causes:**
Review existing data for evidence of which causes are most important. If the data is unavailable or ambiguous, gather fresh data aimed at distinguishing between possible causes.

Example



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