

Problem Management Techniques

When you have a serious problem, it's important to explore all of the things that could cause it, before you start to think about a solution. Cause and Effect Analysis was devised by professor Kaoru Ishikawa in the 1960s. The diagrams that you create are known as Ishikawa Diagrams or Fishbone Diagrams (because a completed diagram can look like the skeleton of a fish).

FOLLOW THESE STEPS TO SOLVE A PROBLEM WITH ISHIKAWA

- STEP 1** → **STEP 2** → **STEP 3** → **STEP 4**
- STEP 1:** Identify the Problem First, write down the exact problem in a box on the right-hand side of a large sheet of paper, and draw a line across the paper horizontally from the box. This arrangement, looking like the head and spine of a fish, gives you space to develop ideas.
- STEP 2:** Work Out the Major Factors Involved. In this example they are be technology, people, environment and processes. Draw a line off the "spine" of the diagram for each factor, and label each line.
- STEP 3:** Identify Possible Causes. For each of the factors you considered in step 2, brainstorm possible causes of the problem that may be related to the factor. Show these possible causes as shorter lines coming off the "bones" of the diagram. Where a cause is large or complex, then it may be best to break it down into sub-causes. Show these as lines coming off each cause line.
- STEP 4:** Analyse Your Diagram. You now have a diagram showing all of the possible causes of the problem. You can now investigate the most likely causes further. This may involve setting up investigations, carrying out surveys, and so on. These will be designed to test which of these possible causes is actually contributing to the problem.

ISHIKAWA DIAGRAM SHOWING POSSIBLE CAUSES

