

How to gain a better understanding of the root causes of problems

The Fishbone Analysis enables you to gain a better understanding of the root causes of problems.

Fishbone Analysis – What is it?

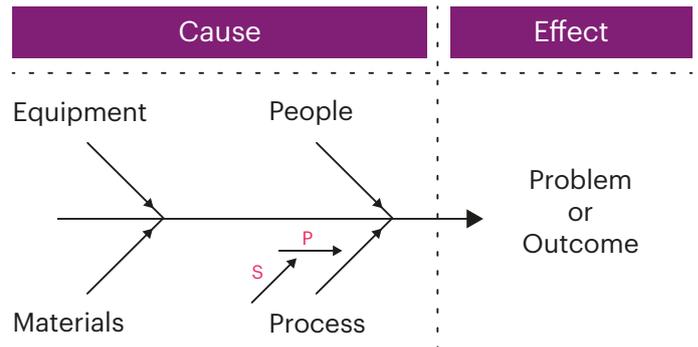
Fishbone Analysis is simply a way of identifying a wide variety of potential causes of a problem and grouping them together in categories. It is also sometimes called Cause and Effect Analysis or an Ishikawa Diagram.

What can it be used for?

This is a very useful way to help get a clearer picture of a problem, to understand the possible causes and to get at the root causes of a problem. It helps the team to understand and have a common opinion about what to work on. Clustering causes together helps form an agenda for task teams to work on, natural groupings emerge making the allocation of resources and skills more efficient.

How to do it:

1. Identify the problem to analyse (the effect) and write it down at one side of the paper with an arrow pointing to it.
2. Establish the major categories of causes and draw these on the diagram as “branches” off the central arrow. The diagram should look like a fishbone. As a guide, Method (Process), Machine (Equipment), Manpower (People), Material are a good starting point but these categories can be tailored to suit.
3. Brainstorm to identify specific contributing causes and write each one on the appropriate “branch” of the diagram.
4. Brainstorm any sub-causes of the larger ones and add them to the diagram.
5. Reflect on what you have done and decide the major or key root causes. These are the ones which you can start to solve.
6. Test for reality.



Tips & Guidelines:

- Other categories in Step 2 could be Environment, Measurement, Packaging, Quality, etc. Six is a manageable number
- Take about 10 or 15 minutes to brainstorm the causes in Step 3 and ask “Why does it happen?” for each one, and look for all possible and potential causes
- Causes may belong in more than one category
- The diagram needs to be drawn on a printing whiteboard/smart board, large piece of paper or flipchart, which provides sufficient space to write all the suggested causes

Once you have identified root causes you will need to address each one as appropriate and develop ways to solve them.

Bourton Group has supported many businesses from a wide range of industries to implement Lean improvement techniques via tailored engagement programs.

We work collaboratively to deliver on efficiency objectives and targets, with returns on investment of over 20:1 being reported, along with wider benefits of reducing waste, decreasing time to complete activities and improvements to quality – all of which have been directly attributed to Lean.