

HOW TO:

Uncover root causes using a fishbone diagram

WHAT/WHY:

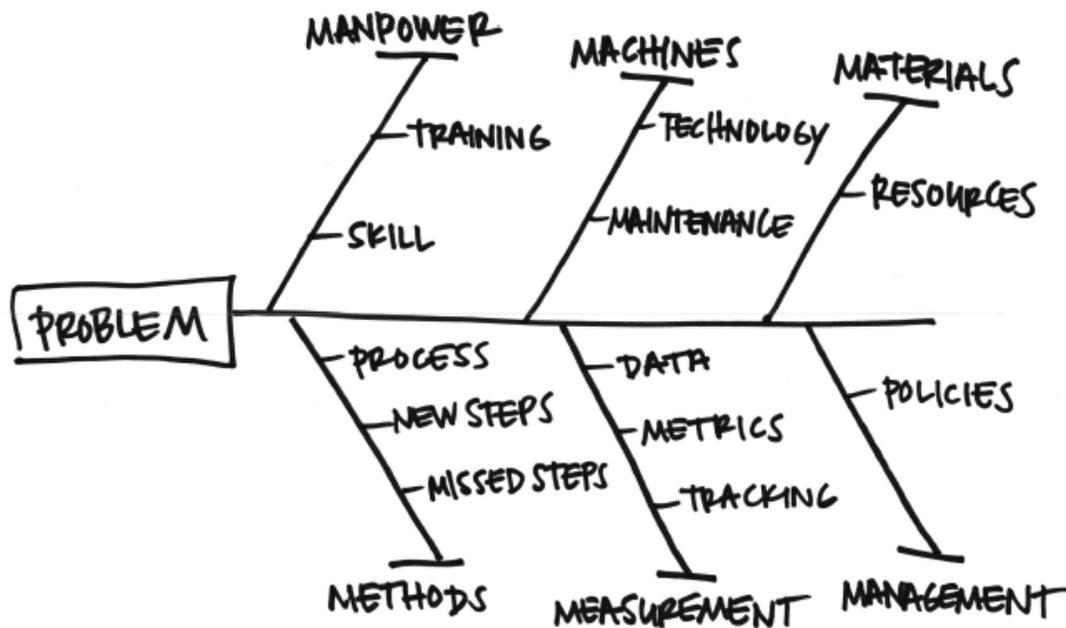
Big Sky uses a cause-and-effect diagram (known also as a “fishbone” or Ishikawa diagram) to help our clients uncover the root causes of the issues they are experiencing, and we use it internally to continuously improve our own processes. This exercise is a structured way to probe for problems. Brainstorming ideas helps ensure that all reasonable possible causes are considered. If used properly it can also prevent future problems as well.

WHEN:

Do this when you have an identifiable and clearly defined problem on your hands. Remember that this exercise is intended to identify all of the possible *causes* of the problem - a precursor to figuring out *solutions* to address the root causes. (While you shouldn't expect to have all of the answers at the end of this session, you will know the right questions to ask to get there!)

WHO:

If you want to maximize your results, do this exercise with a group of participants who have varying levels of familiarity with the problem that's been identified. Those who are very close to the problem will be able to provide more detailed and technical suggestions about the root causes - but they are also likely to be so deep into the problem that their perspective and creativity may be limited. Inviting a few people who are less enmeshed in the issue at hand will increase the collective brainpower and push the group to think beyond stale ideas.



HOW:

When filling in a fishbone diagram, the team works through the “whys” of each category. Within the fishbone diagram the problem is linked to six major problem source categories. Normally these are:

- **Manpower (Personnel)** - did a misalignment between workforce skills and critical needs cause the problem?
- **Machines** - was the technology employed not up to the task?
- **Materials** - are resources misaligned or lacking, including budget planning and realism?
- **Methods** - did procedures break down or were they not relevant to address problems?
- **Measurements** - can the organization keep track of the things that matter in a quantifiable way?
- **Management** - do policies conflict with practices?

Contact Big Sky to discuss how root cause analysis can help you achieve success.