

How to Create an Ishikawa Diagram



What is an Ishikawa Diagram?

An Ishikawa diagram identifies and classifies the causes of potential defects or problems.

When is an Ishikawa Diagram used?

This tool can be used during the Measure (to classify potential causes) and the Analyze (to analyze root causes) phases of a DMAIC Project.

What is the purpose of an Ishikawa diagram?

1. To help look beyond symptoms to uncover potential root causes.
2. To provide structure to a root cause identification effort.
3. To ensure a well balanced list of ideas have been generated during brainstorming and that major possible causes are not overlooked.

What is the purpose of an Ishikawa diagram?

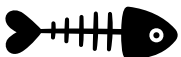
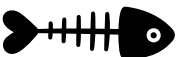
- A Define the problem statement. This will be the head of the fish.
- B Define the major cause categories. These will be the spines.
- C Brainstorm to detect the possible causes per category.
- D Focus on one category at a time and discover the root cause of each possible cause.
- E Map it out in programs such as Excel or Visio and review the diagram for completeness.
- F Identify and mark causes that are most critical according to the team.
- G Develop plans to confirm that the potential causes are actual causes.

Tips to define a problem statement

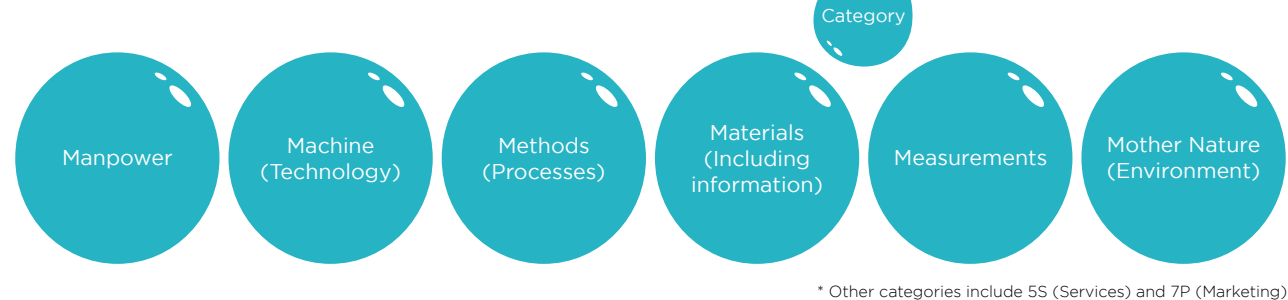
You can use the SMART rules to define the problem statement:



Potential sources of a problem statement are:

Process KPI's  Financial results  Voice of the customer (internal & external)

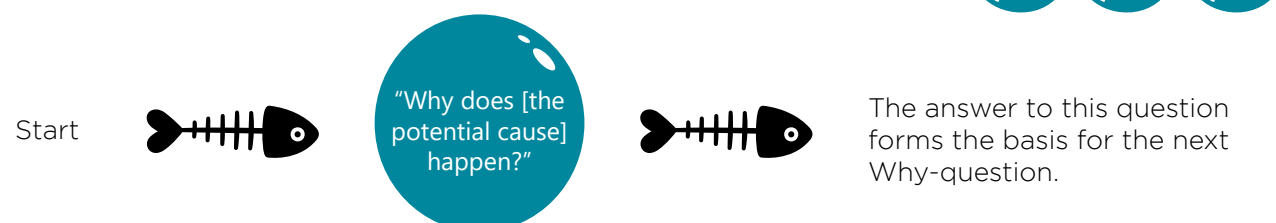
Define the major factors involved using the 6M*



* Other categories include 5S (Services) and 7P (Marketing)

Root Cause Analysis - 5 Whys

The "5 Whys" is an interrogative approach used to derive the root causes of a problem.



Ishikawa Diagram Structure

