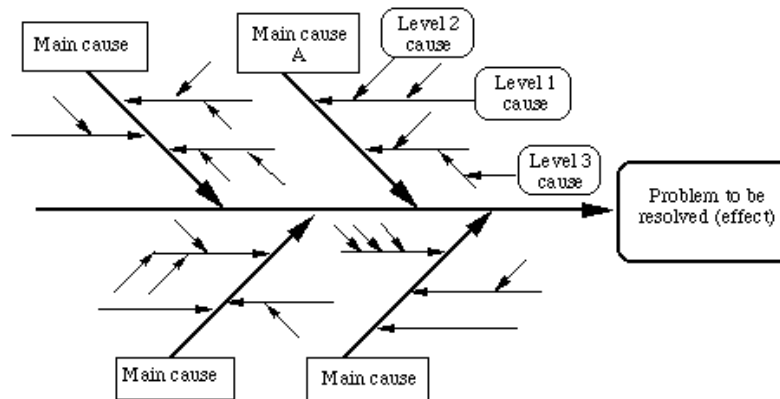


What is a Fish Bone Diagram?

A fishbone diagram is a cause and effect diagram that can be used to identify the potential causes of a problem. Fishbone diagrams provide a structure for a group's discussion around the potential causes of the problem. Thus it is a team brainstorming tool used to identify potential root causes to problems. It is also referred to as the "Ishikawa diagram," because Kaoru Ishikawa developed it, and the "fishbone diagram," because the complete diagram resembles a fish skeleton. A skeletal fishbone diagram is shown below.



When to apply?

- When you want to focus attention on one specific issue or problem.
- When you want to focus the team on the causes, not the symptoms.
- When you want to show the relationship of various factors influencing a problem.
- When you want to provide additional insight into process behaviors.

Procedure

1. Identify and clearly define the outcome or effect to be analyzed.
2. Draw the spine and create the effect box.
3. Identify the main causes contributing to the effect being studied.
4. For each major branch, identify other factors which may be the causes of the effect
5. Identify increasingly more detailed levels of causes and continue organizing them under related causes or categories. You can do this by asking a series of why questions.
6. Analyze the diagram. Analysis helps you identify causes that warrant further investigation.

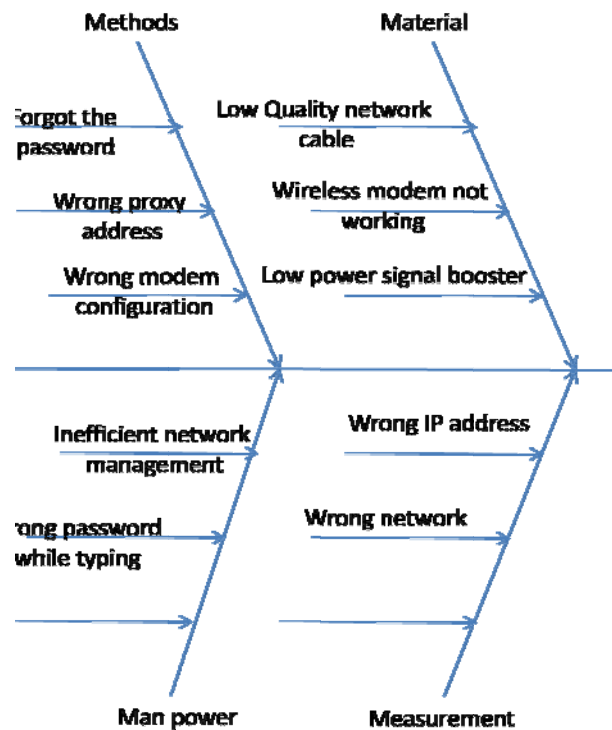
Advantages

- Fishbone diagram is a thoughtful analysis avoiding overlooking root causes for a need.
- It is easy to create and understand the visual representation of the causes, categories, and the need.
- You are able to focus on possible causes or factors influencing the problem/need.
- Even after the need has been addressed, the fishbone diagram shows areas of weakness: once exposed can be rectified before causing more sustained difficulties.

Example

Problem : Low speed and intermittent connectivity problem of internet.

Solution



Reference Links

- <http://siteresources.worldbank.org/WBI/Resources/213798-1194538727144/Fishbone.pdf>
- http://www.mindtools.com/pages/article/newTMC_03.htm
- http://www.improhealth.org/fileadmin/Documents/Improvement_Tools/Fishbone.pdf