

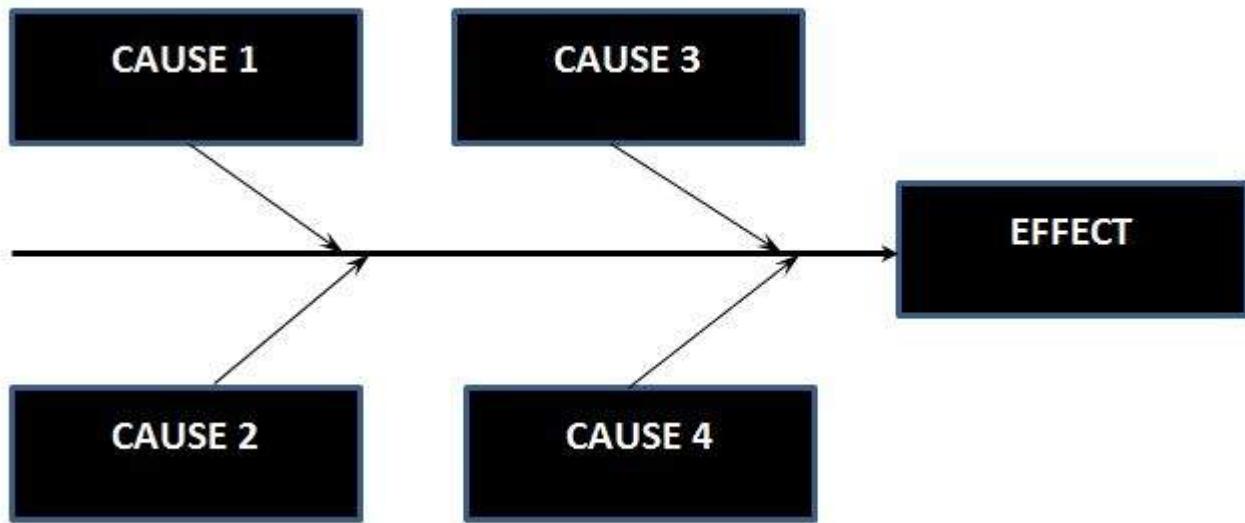
CAUSE-EFFECT GRAPH

What is Cause-Effect Graph?

Cause Effect Graph is a black box testing technique that graphically illustrates the relationship between a given outcome and all the factors that influence the outcome.

It is also known as Ishikawa diagram as it was invented by Kaoru Ishikawa or fish bone diagram because of the way it looks.

Cause Effect - Flow Diagram



Circumstances - under which Cause-Effect Diagram used

- To Identify the possible root causes, the reasons for a specific effect, problem, or outcome.
- To Relate the interactions of the system among the factors affecting a particular process or effect.
- To Analyze the existing problems so that corrective action can be taken at the earliest.

Benefits :

- It Helps us to determine the root causes of a problem or quality using a structured approach.
- It Uses an orderly, easy-to-read format to diagram cause-and-effect relationships.
- It Indicates possible causes of variation in a process.
- It Identifies areas, where data should be collected for further study.
- It Encourages team participation and utilizes the team knowledge of the process.
- It Increases knowledge of the process by helping everyone to learn more about the factors at work and how they relate.

Steps for drawing cause-Effect Diagram:

- **Step 1 :** Identify and Define the Effect
- **Step 2 :** Fill in the Effect Box and Draw the Spine
- **Step 3:** Identify the main causes contributing to the effect being studied.

- **Step 4 :** For each major branch, identify other specific factors which may be the causes of the EFFECT.
- **Step 5 :** Categorize relative causes and provide detailed levels of causes.