

Cause and Effect Diagram How-to Guide

Use this How-to Guide to complete the Cause and Effect Diagram.

Purpose

The purpose of the Cause and Effect Diagram is to help the project team identify potential causes for a specific problem. The identified causes can then be targeted and prioritized during the solution discovery phases of a business process improvement project.

When to Use a Cause and Effect Diagram

The Cause and Effect Diagram is used during the Assessment phase of the RAPID methodology, when identifying issues related to the problem statement.

How to Use a Cause and Effect Diagram

Complete the following steps to create a Cause and Effect Diagram.

1. Review the common causes in the template, which include:
 - Equipment: is the equipment – such as software or tools – adequate, or is it causing the stated problem?
 - Policies: what policies, if any, may be causing the problem?
 - Procedures: are there inconsistencies or waste in the business process that can be identified?
 - People: who is involved with the process and what may be some issues that cause the stated problem?
2. Input the problem statement in the rightmost box in the template.
3. Add to, adjust, or remove any of the cause categories as appropriate for the nature of the project.
 - For example: price, environment, skills, and materials may be added as causes.
 - In the Excel and Word templates, additional branches or boxes can be added by CTRL+clicking, then dragging existing branches and arrows to duplicate them.
4. Brainstorm to list any potential causes for the stated problem. Causes may include sub-causes that can ultimately point to the source of an issue. Sub-causes are added as a branch off of the associated cause.
 - See the Cause and Effect Sample for examples.
5. Use the completed Cause and Effect Diagram to assist with other improvement brainstorming activities.

Tips

- If a cause category has only a few sub-causes listed, focus on these cause categories to ensure that all factors are considered and that you haven't overlooked some sub-causes.

- Cause and Effect Diagrams are best created with a whiteboard or flip chart during the team brainstorming session. The completed diagram can then be created using the included templates, and distributed to the team for review.

References

Simon, K. (2015). The cause and effect (a.k.a. fishbone) diagram. In *iSixSigma*. Retrieved from <http://www.isixsigma.com/tools-templates/cause-effect/cause-and-effect-aka-fishbone-diagram/>

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