CAUSE AND EFFECT ISHIKAWA FISHBONE DIAGRAM

Excel Template User Guide

A Cause and effect diagram, aka a fishbone diagram, Ishikawa diagram and herringbone diagram, is a tool used for problem root cause analysis that helps to identify, sort and display possible causes of a specific problem or quality characteristic.

In Root Cause Analysis (RCA) it graphically illustrates the relationship between a given outcome and all the factors that influence the outcome.

The root cause analysis results are typically grouped into categories to identify the sources of variation. Standardized categories have emerged depending on the industry sector. This has given rise to three popular Cause and Effect Fishbone diagrams based on the root cause categories. These are:

- 6 Ms used in manufacturing sector
- 7 Ps used in marketing environments
- 5 Ss used in the service industries

The Excel Template provides three templates in a single Excel Workbook.

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1 INTRODUCTION

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- 6 Ms used in manufacturing sector (Figure 1)
- 7 Ps used in marketing environments (Figure 2)
- 5 Ss used in the service industries (Figure 3)



Figure 1 6Ms Cause and Effect Ishikawa Fishbone Diagram

6 Ms: Manufacturing Sector

- Machine (technology)
- Method (process)
- Material
- Man Power/Mind Power
- Measurement
- Milieu/Mother Nature (Environment)

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Figure 2 7Ps Cause and Effect Ishikawa Fishbone Diagram

7 Ps: Marketing Environments

- Product/Service
- Price
- Place
- People
- Process
- Physical Evidence



Figure 2 7Ps Cause and Effect Ishikawa Fishbone Diagram

5 Ss: Service Industries

- Surroundings
- Suppliers
- Systems
- Skills
- Safety

The template requires Excel 2007 or later edition.

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2 USER INSTRUCTIONS

The Cause and Effect Ishikawa Fishbone Diagram Excel Template provides three templates in a single Excel Workbook. You get all three to use as you find most appropriate.

Each template is self-contained in a tab within the workbook.

| Three | templates are available for |
|-------|---|
| 1 | 6 Ms Cause and Effect Diagram (used in Manufacturing) |
| 2 | 7 Ps Cause and Effect Diagram (used in Marketing) |
| 3 | 5 Ss Cause and Effect Diagram (used in Service Industries |

Figure 4 Cause and Effect Ishikawa Fishbone Diagram Menu

Select the chosen template from the menu (figure 4 above) or go directly to the relevant tab in the Excel workbook.

The Effect: The description of the Effect can be entered in the appropriate box by clicking within the box and edited the text within the box.

The Causes: Up to three Causes can be entered under each category or classification e.g. the 6 Ms. To enter or edit any Cause click into the relevant box and type the required text.

1

3 PRINTING THE DIAGRAM



Figure 5 Selecting the Print area of the Cause and Effect Ishikawa Fishbone Diagram

To print the completed diagram:

- 1. Select "Print_Area" from the dropdown list as depicted in item 1 in figure 5 above.
- 2. Select Print and the desired printer from the Excel File menu
- 3. Use the "Print Selection" and "Landscape Orientation" from the printer options.