SIPOC Diagram How-to Guide

This How-to Guide should be used to create the SIPOC diagram.

Purpose

The purpose of a SIPOC (Suppliers, Inputs, Process, Outputs, Customers) diagram is to identify all relevant elements of a process. A SIPOC diagram sometimes will help define the scope and set the boundaries of a process improvement project.

When to Use a SIPOC Diagram

The SIPOC diagram is useful to provide a high-level overview of a process and answers the following questions:

- Who provides input to the process?
- What goes into the process?
- How are the inputs transformed to outputs?
- What comes out of the process?
- Who receives the outputs of the process?

How to Use a SIPOC Diagram

Use the following steps to create a SIPOC diagram:

- Set up a work area that will allow the team to participate in actively creating the SIPOC diagram.
  - This could involve using a whiteboard, a flip chart with written headings (S-I-P-O-C), or headings written on post-it notes stuck to a wall.
- Complete the SIPOC.
  - Identify the Process – How are the inputs transformed to outputs?
    - It is recommended to begin with the P – Process section of the SIPOC first.
    - The process should have at least four steps and no more than seven steps to identify the process.
    - These steps will become the high-level process map and the scope and boundaries of the project.
  - Identify the Inputs – What goes into the process?
  - Identify the Suppliers – Who provides input to the process? This could be both internal and external suppliers.
  - Identify the Outputs – What comes out of the process?
  - Identify all possible Customers – Who received the outputs of the process? This could be both internal and external customers.
- Document the SIPOC using one of the templates provided.
  - When entering information into the template, the spacing of the content in each column could be used to correlate a relationship between the columns.

- If no relationship is intended, start each column on the same row and position within the cell.
  - An option to show the order of a process would be listing the process in the execution order in the Process column and numbering each step.

Tips

- A SIPOC diagram is useful for focusing a discussion and helping team members agree upon a common language and understanding of a process.
- Involve the project team in the creation of the diagram.
- Specify where the process starts and where the process ends. This helps align the scope of the project.
- Review – some use a different order:
  - Identify the start and end points of the process
  - Fill in the major steps
  - Identify the outputs
  - Identify the customers
  - Identify the inputs
  - Identify the suppliers

References

George, M. L., Rowlands, D., Price, M., & Maxey, J. (2005). *The Lean Six Sigma Pocket Toolbook.* New York, NY: McGraw-Hill.