SIPOC

- A high-level map of a process
- A tool that allows a team to see their target process in relation to all needed inputs, outputs, and suppliers
  - Shows process boundaries
  - Identifies relationship between suppliers, inputs and the process
  - Determines key customers
Why Develop Such a Map?

- Helps the team understand the process
- Validates the project scope
- Provides focus for the team
- Helps identify areas that are within (as well as beyond) your control.
- Serves as a communication tool to clarify the process to others, both internally and externally
- Creates a bridge between project charter and later work

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**Project charter**
- Problem statement
- Project Scope

**Detailed process analysis**
- (in **Analyze** and **Improve** phases)
SIPOC: Questions To Consider

- **Purpose**
  - Why does this process exist?
  - What is the purpose of this process?
  - What is the outcome?

- **Customers**
  - Who uses the products from this process?
  - Who are the customers of this process?

- **Outputs**
  - What product does this process make?
  - What are the outputs of this process?
  - At what point does this process end?

- **Process**
  - What happens to each input?
  - What conversion activities take place?

- **Inputs/Suppliers**
  - Where does the information or material you work on come from?
  - Who are your suppliers?
  - What do they supply?
  - Where do they affect the process flow?
  - What effect do they have on the process and on the outcome?
Elements of a SIPOC

- **S**uppliers
- **I**mputs
- **P**rocess
- **O**utsputs
- **C**ustomers

**Measures**

**Process Map**
Elements of a SIPOC

- **Supplier**: A person or organization that provides the inputs to your process.
- **Input**: Materials, resources and data required to execute your process.
- **Process**: A collection of activities that takes one or more kinds of input and creates output that is of value to the customer.
- **Output**: The tangible products or services that result from the process – should satisfy customer need.
- **Customer**: A person or organization receives the outputs of your process - internal or external.
- **Boundary**: The limits of a particular process, usually identified by the inputs and outputs, that separate what is outside the process – where it starts and stops.
Steps to Building a SIPOC

1. Identify the process (i.e. the "P" in SIPOC)
   Name it and agree on beginning and end boundaries (5-10 high-level steps)

2. Specify the “O” (primary outputs) and the “C” customers receiving them
   Use nouns for outputs (e.g., sales call, quotation, etc.)

3. Fill in the process steps under “P”... Some practical suggestions...
   Involve the whole team (brainstorming)
   Team members write process steps on cards and post on wall
   One step per card
   Begin all steps with a verb
   Don't try to establish order or discuss process steps in detail

4. Identify critical inputs which affect the quality of the process ("I").

5. For each input, identify the “supplier” who provides it (“S”).

6. Validate the map
   Does it represent how things actually work today (not how you think it is, or how it should be)?
SIPOC: Example

**S** (Use (Nouns))
- Family
  - Requirements & Needs
  - Budget

**I** (Use (Nouns))
- Dealers
  - Specs
  - Prices
  - Availability

**P** (Use Verbs)
- Determine car purchase options
  - Visit dealers; identify best deals
  - Review data w/family
  - Agree on best option
  - Negotiate w/dealer
  - Secure loan
  - Pick up car

**O** (Use (Nouns))
- Bank
  - Loan details

**C** (Use (Nouns))
- Me
  - Family
  - Choice of car
  - Negotiated agreement for purchase
  - Secured loan
  - New car
## SIPOC Template

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Input</th>
<th>Process</th>
<th>Output</th>
<th>Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providers of required resources</td>
<td>Resources required to complete process action</td>
<td>Description of activity that transforms input</td>
<td>Deliverable from the process activity</td>
<td>Who receives the output</td>
</tr>
<tr>
<td>Requirement</td>
<td></td>
<td></td>
<td>Requirement</td>
<td></td>
</tr>
</tbody>
</table>

The SIPOC Template is used to understand the critical elements of a process: Supplier, Input, Process, Output, Customer. Each column represents a different aspect of the process, helping in identifying and organizing the requirements and resources needed for a process to function effectively.
Validating the SIPOC

- Compare your SIPOC against your project scope
- Look for areas out of your control or beyond the scope of your project
- Make sure the scope of the project and the boundaries of the process map are in alignment
- If you need to change the project's scope, be sure to get approval from key stakeholders before proceeding with your improvement project