



# Continuous Improvement Toolkit

## World-Class Performance Tools for Business and

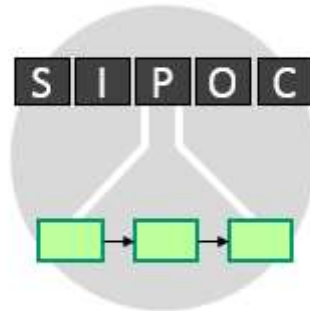
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## SIPOC Mapping

A **SIPOC Map** is a high-level process map that defines the scope of a process and its inputs, outputs, suppliers and customers. It represents the flow of the process and its key elements in a table format. It is widely used in process design and improvement initiatives to identify relevant information before starting a project. SIPOC is an acronym that stands for Suppliers, Inputs, Process, Outputs and Customers.



SIPOC mapping is used to help ensure everyone understands the core process when it is too early for a detailed process mapping. It serves as a communication tool and provides people who are unfamiliar with the process a high-level overview and to see it from the same point of view. It can also be used in defining and designing new processes. However, the most common area where the SIPOC mapping is used is at the beginning of a process improvement initiative, during the Define phase of DMAIC, or during the planning phase of a Kaizen event. It can provide focus to the team and allow other

stakeholders to agree on the project scope and the core process involved.

A SIPOC map helps define the scope of work for a project and identify areas that are within or beyond the control of the team. It helps the team to identify potential gaps such as unnecessary inputs, outputs that customers don't want, or process steps that add no value. It also helps the team to begin thinking in terms of cause and effect and to see the relationships between the inputs and outputs of the process. Note that SIPOC doesn't ask to provide links between suppliers and inputs, or customers and outputs.

In order to create a SIPOC map, you have to specify the main activities of the process and identify the potential suppliers, inputs, outputs, and customers:

- A **Supplier** is a person or company that supplies inputs to the process.
- An **Input** is the material, energy, information, manpower, and financial resources which are needed to execute the process.
- A **Process** is a collection of activities that take one or more inputs to create an output that is of value to the customer.
- An **Output** is the tangible product or service that results from the process and could be in the form of physical object, information or both.
- A **Customer** is the person or company that receives the outputs of the process. Note that suppliers and customers may be internal or external to the organization.

## How to Create a SIPOC Map:

A SIPOC map can be created quickly by drawing a table of five columns then title them respectively as: suppliers, inputs, process, outputs and customers. You

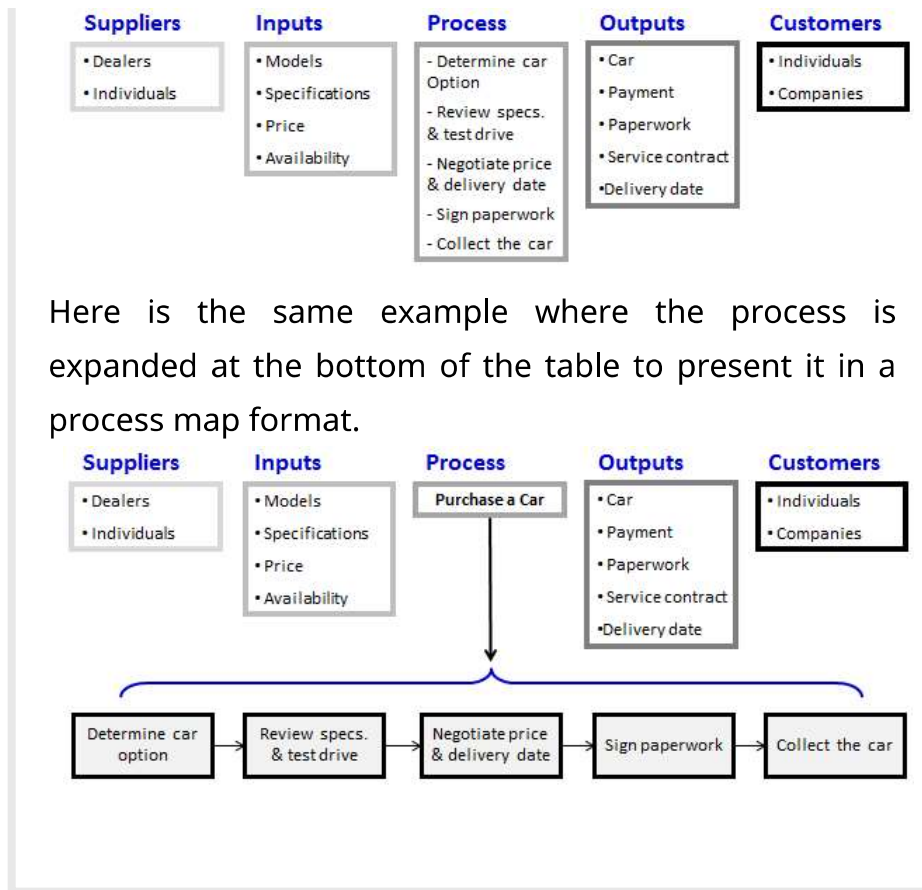
can then add each of the SIPOC elements in the appropriate column.

Like process mapping, SIPOC is a team effort. Your team should include people with enough knowledge of the process. The following steps describe how to create a SIPOC map with your team:

- Clearly explain the purpose for creating the SIPOC map.
- Emphasize that the map must represent the situation as it exist today, not how it should be.
- Hang out five large flip-charts to allow you team to provide their input on each of the five categories.
- Begin with the process by writing the key highest-level steps.
- Use brainstorming to identify the primary outputs of the process. Then identify the customers who will receive those outputs.
- Use brainstorming to identify the primary inputs required for the process to function properly. Then identify the suppliers of those inputs.
- Take time to ensure the appropriateness and completeness of the recorded information.
- Discuss the SIPOC map with key stakeholders to verify accuracy.

## Example:

The following is an example of a car purchasing process mapped using SIPOC which identifies the major process steps, the primary process inputs and outputs, and the key customers and suppliers.



## Further Information:

- Sometimes it is useful to display on the SIPOC map the requirements that are important to the customers.
- The IPO (inputs-processing-outputs) is a simpler model that represents the most basic structure for describing a process. It is widely used in software engineering and systems analysis and can be equally useful in both process design and process improvement efforts.

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