

Six Sigma Black Belt – Study Guides



Measure

SIPOC



Meaning and importance of SIPOC diagram

• SIPOC is a graphical representation of the end to end process showing how it is serving the customer.

SIPOC

- S Suppliers who provide inputs to the process.
- I Input. Generally inputs such as material, service, or information are used in the production process.
- P Process. It is a sequence of actions that gives value to the inputs for producing outputs for the customer.
- O Outputs. These are the products, services, and information that are valuable to the customer.
- C Customers who use the output (product / service).



When to use SIPOC

SIPOC is used to provide an overall understanding of the processes in the project and provide for common frame of reference for all team members.

Some questions answered by using SIPOC:

- Are you sure about who supplies inputs to the process?
- · What kinds of specifications are placed on the inputs?
- What are the requirements needed for the customer?
- Who are the actual customers of the process?



Steps to create a SIPOC diagram

- Create a template or flip chart that will have headings of SIPOC. This
 enables the team to post some additions to the diagram.
- Commence the process by mapping it into four to five high level steps.
- Find the outputs of this process.
- Identify the customer who gets the outputs of this process.
- Identify the inputs that are essential for the process to work properly.
- Identify the suppliers of the inputs that are necessary for the process.
- Identify the preliminary requisites of the customer.

Inputs and outputs

- Inputs and outputs form the fundamental aspects of a process.
- Inputs can be any item purchased by an organization that is used for or in production, supplies, freight, utilities, labor, contributions, etc. Other items such as natural lighting, heating, cooling, water, clean air, natural resources, etc. that are used for production which are not paid for by the company can also form a part of inputs.
- Outputs can be anything that is produced during the course of the operation of an organization. Therefore, outputs can be any or all of the following - products, wastes, financial benefits to the employees, community, shareholders, etc.

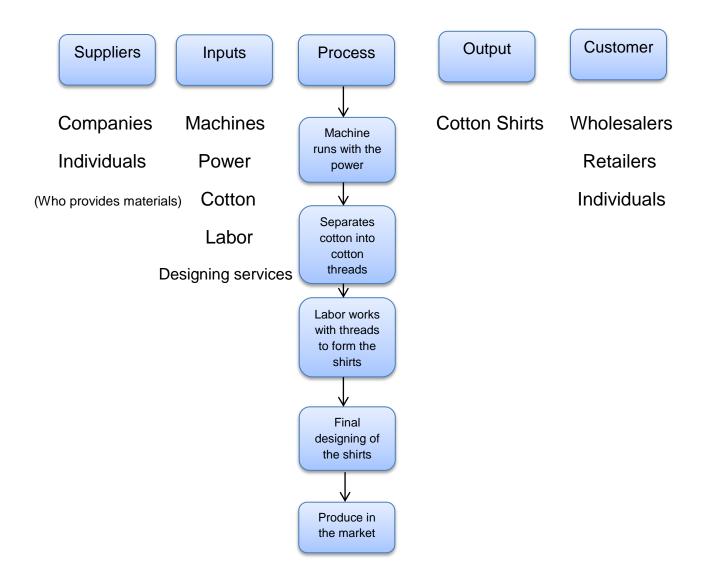


Different processes involved in a SIPOC diagram

- Suppliers in the form of individuals or companies will provide inputs (raw materials) that are very essential to the process. Here the suppliers can be internal or external or they can also be customers. For example, if you are running a cotton shirts manufacturing company (ABC Inc.), your key suppliers will be for machines, power, cotton, cotton threads, labor, designing services, etc.
- These inputs are usually the materials, information, or services that are compulsory for the process to produce the outputs. These inputs also incorporate other factors that influence the overall process.
- The key process steps and the sequences that are followed should be arranged properly at the time of defining the process. These process steps should be written in a meaningful and sequential manner. During this stage, it helps to set up the process boundaries as to what triggers the process and what marks the end of the process.
- Some important steps in the process of manufacturing cotton shirts include receiving an order from the customer, manufacturing shirts, packing the shirts, and delivering the best shirts to the customer. The output will be finished cotton shirts.



The example below illustrates the SIPOC process of ABC Inc. that manufactures cotton shirts.





Conclusion

- Meaning and importance of SIPOC
- When to use SIPOC
- Steps to create a SIPOC diagram
- Different processes involved in a SIPOC diagram
- Example