

SIX SIGMA

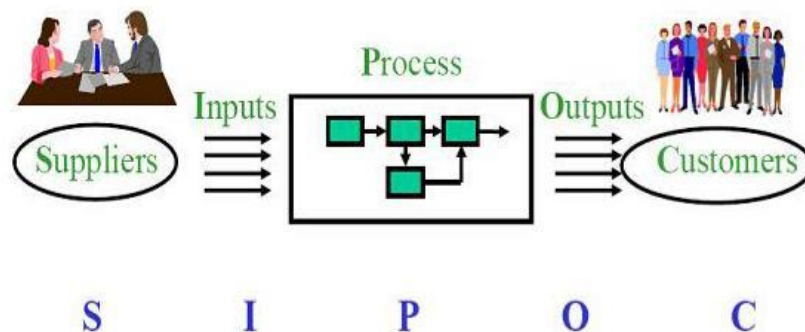
QUALITY TOOLS SIPOC

Description of SIPOC

A SIPOC is a high level process that defines the working relationship between various stakeholders and the alignment with key outputs. It allows the project team to identify all relevant elements of a process improvement project before the work begins. It helps define a complex project that may not be well scoped, and is typically employed at the Define/Measure phases of the Six Sigma DMAIC (Define, Measure, Analyze, Improve, Control) methodology.

It is an acronym for Suppliers - Inputs - Process - Outputs - Customers.

It is similar and related to process mapping and 'in/out of scope' tools, but provides additional detail.



When to use a SIPOC

A useful tool to define the boundaries of your process and to help you make sure your project focus is not too broad or too narrow. A SIPOC also places focus on the starting point being the customer by identifying who the customer is and critical

outcomes of the process. This is referred to as COPIS focus. (Start with the C, the customer)

How to use the SIPOC

SIPOC diagrams are very easy to complete. Here are the steps you should follow:

1. Identify the Customers (C) of the process, the user of the output. Note: a customer can reside within or outside the organization.
2. Identify the outputs (O) of this process. Outputs are the deliverables: finished products or services of the process.
3. Identify the inputs (I) required for the process to function properly. Inputs are what flows into the process. For example, material, equipment, information etc.
4. Identify the suppliers (S) of the inputs that are required by the process. Suppliers are individuals or organizations that provide inputs to the process. These can be internal (e.g. department, division, or individuals) or external (e.g. vendors, government, or individuals). It is also possible that a supplier is also a customer.
5. Identify the beginning and end steps of the process.(P) Build the process steps at a high level, keep it to 4-6 major steps. This clarity of process boundaries is necessary starting point for the project.
6. Discuss with project sponsor, Champion and other involved stakeholders for verification. Modify as required.

Tips on use of SIPOC

Always start a SIPOC from an "outside" to "in" so start with identifying the customer.

SIPOC creation is a team activity. Engage stakeholders of the process under review and brainstorm the components of the SIPOC. Always start with the customer and work backwards.

A SIPOC can be created for a new product or service under consideration as well as an existing.

When building the high level process steps, if multiple products/services are outputted by the same process, use a Product Family Matrix to help determine which product goes with what steps of the map

The SIPOC tool is particularly useful when it is not clear:

Who supplies inputs to the process?

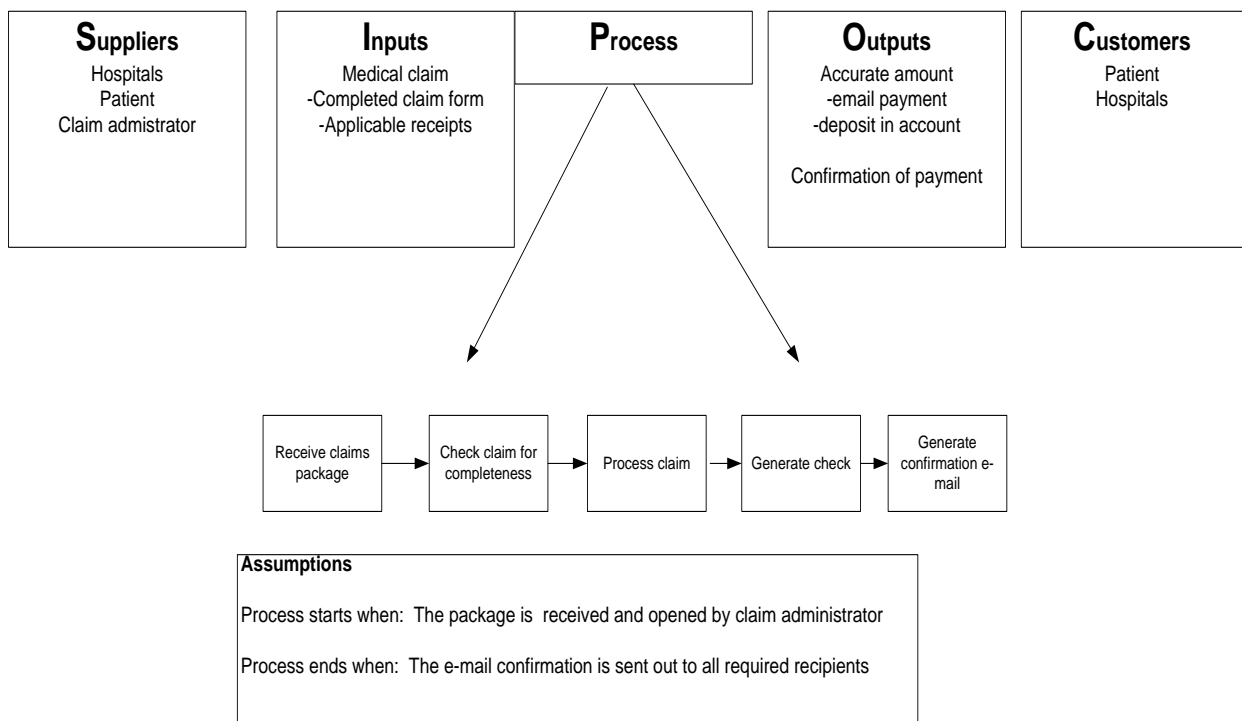
What specifications are placed on the inputs?

Who are the true customers of the process?

What are the requirements of the customers?

Application of SIPOC

PROCESS: A HEALTH INSURANCE CLAIM



References

Pzydek, Thomas, The Six Sigma Handbook, McGraw Hill Companies 2003

George, Michel, Lean Six Sigma, Combining Six Sigma Quality with Lean Speed, McGraw Hill, 2002