

SIX SIGMA - DEFINE PHASE

There are five high-level steps in the application of Six Sigma to improve the quality of output. The first step is **Define**. During the Define phase, four major tasks are undertaken.

Project Team is Formation

Perform two activities:

- Determine who needs to be on the team.
- What roles will each person perform?

Picking the right team members can be a difficult decision, especially if a project involves a large number of departments. In such projects, it could be wise to break them down into smaller pieces and work toward completion of a series of phased projects.

Document Customers Core Business Processes

Every project has customers. A customer is the recipient of the product or service of the process, targeted for improvement. Every customer has one or multiple needs from his or her supplier. For each need provided for, there are requirements for the need. The requirements are the characteristics of the need that determine whether the customer is happy with the product or service provided. So, document customer needs and related requirements.

A set of business processes is documented. These processes will be executed to meet customer's requirements and to resolve their Critical to Quality issues.

Develop a Project Charter

This is a document that names the project, summarizes the project by explaining the business case in a brief statement, and lists the project scope and goals. A project charter has the following components:

- Project name
- Business case
- Project scope
- Project goals
- Milestones
- Special requirements
- Special assumptions
- Roles and responsibilities of the project team

Develop the SIPOC process map:

A process is defined as a series of steps and activities that take inputs, add value, and produce an output.

SIPOC is a process map that identifies all the following elements of a project:

- **S**uppliers
- **I**nterface
- **P**rocess
- **O**utput
- **C**ustomers

The SIPOC process map is essential for identifying:

- The way processes occur currently.
- How those processes should be modified and improved throughout the remaining phases of DMAIC.

Conclusion

At the conclusion of the design phase, you should know who the customer or end-user is, their resistance issues, and requirements. You should also have a clear understanding of goals and the scope of the project including budget, time constraints, and deadlines.