

Summary

In this lesson, you learned about four types of process maps commonly used by problem-solving teams: The type of map you use depends on your process and the type of problem you are trying to solve. SIPOC maps and I/O maps show the primary steps in the process, list the inputs and outputs, and also show the CTQs.

They can be used when you have only a few process steps, when the process is linear, and when you want to identify the most important variables. Top-down flowcharts are used when you have a few major steps with many substeps.

They are also used when your process isn't well defined. Deployment flowcharts are used when you want to map the flow of materials or information through different functional areas.

You might need a more detailed flowchart that shows all the steps in a process. Traditional (detailed) flowcharts can be useful but they are often used later in the problem-solving process.

It's easy to get lost in the details when you develop a detailed flowchart. A final type of map, a value stream map, is used to identify value-added and non-value-added activities in a process. If you are studying process efficiencies, queue times, and backlogs, you might want to create a value stream map.

Earlier in this module, you learned about statistical thinking. You learned that all work occurs in a system of interconnected processes, and that variation exists in all processes. If you are going to reduce variation, you must understand the process and the sources of variation within the process.

The process maps introduced in this lesson help focus your attention on the process. Process maps also provide a wealth of information that can be used throughout the problem-solving process.

They provide an in-depth understanding of the process. They help define how the work is actually done versus how we think it's done. They help bound the scope of the problem. They show customer-supplier relationships. They can help identify inefficiencies, gaps, bottlenecks, and inconsistencies. They help identify critical process inputs. They provide information that can be used with other problem-solving tools.

For more information about process mapping, see the Read About It for this module.