

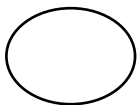
Overview: Performance Improvement Project (PIP) teams frequently must study an existing or new process in order to better understand each step and identify where improvements can be made. A flowchart is a tool that allows you to break any process down into individual events or activities and shows the logical relationships between them. Flowcharting is often used by PIP teams when conducting root cause analysis (RCA) and/or failure mode effects analysis (FMEA) (See Guidance for Performing RCA with PIPs, and/or Guidance for Performing FMEA with PIPs).

A flowchart:

- Facilitates the team's common understanding of the steps in a process
- Highlights decision points and decision outcomes
- Helps a team understand whether a process occurs in one or multiple ways
- Promotes system-thinking about how the work is made up of interacting steps
- Provides visualization of complexity, rework, and problem areas; this insight can suggest where simplification, elimination of unnecessary steps, and standardization may be possible
- Enables comparison of the way the process actually occurs with the planned or ideal flow

How do you develop a flowchart?

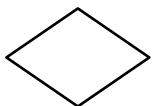
Flowcharts are diagrams that use shapes to show the types and flow of steps in a process. The shapes represent different types of steps or actions.



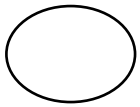
= beginning and end of a process



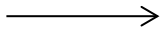
= a task or activity performed in the process



= a decision point (yes/no)



= beginning and end of a process



= direction or flow of the process

To draw the flow chart, brainstorm the steps in the process, and list them in the order they occur. Ask questions such as "What really happens next in the process?" and "Does a decision need to be made before the next step?"

Work through your whole process, showing actions and decisions in the order they occur, linking these together using arrows to show the flow of the process. Decisions are represented as diamonds and reflect a condition that impacts the process (e.g., if yes, then...; if no, then...). At each decision diamond, draw an arrow for each decision outcome. Typically there are two decision outcomes such as, yes/no or true/false. Continue charting the process as it would be performed as a result of the decision.

If you find that your process occurs in multiple ways; i.e., different people or units do things differently, you may want to flow chart the process in each of the different ways it occurs. This can help you to understand what, when, and why variation is occurring, and informs any process improvement changes you plan.

Finally, review your flowchart. Work through each step asking your team if you have correctly represented the sequence of actions and decisions involved in the process. And then (if you're looking to improve the process) look at the steps identified and think about whether work is duplicated, whether other steps should be involved, where gaps or breakdowns occur, where you can make improvements in your process.

Tips:

- When developing a flowchart, include people with personal knowledge of the process being discussed.
- Many teams find it easy to flowchart on large poster size sheets, using sticky notes for process steps, or on white boards. This allows you to move steps around and add steps as you define the process.