

Table 1.2 Overview of Tools for Improvement

Category	Tool	Typical Use of Tool
Viewing Systems and Processes	Flow Diagram	Develop a picture of a process. Communicate and standardize processes.
	Linkage of Processes	Develop a picture of a system composed of processes linked together.
	Causal Loop Diagrams	Identify reinforcing and balancing processes.
Gathering Information	Form for Collecting Data	Plan and organize a data collection effort.
	Operational Definitions	Provide communicable meaning to a concept by specifying how the concept will be applied within a particular set of circumstances.
Organizing Information	Affinity Diagram	Organize and summarize qualitative information.
	Force Field Analysis	Summarize forces supporting and hindering change.
	Cause and Effect Diagram	Collect and organize current knowledge about potential causes of problems or variation.
	Matrix Diagram	Arrange information to understand relationships and make decisions.
	Tree Diagram	Visualize the structure of a problem, plan, or any other opportunity of interest.
	Interrelationship Diagram	Identify and communicate logical and sequential connections between components of a problem.
	Radar Chart	Evaluate alternatives or compare against targets with three or more variables or characteristics.
	Driver Diagram	Display the theory for improvement in an improvement project.
Understanding Variation	Run Chart	Study variation in data over time; understand the impact of changes on measures.
	Pareto Chart	Focus on areas of improvement with greatest impact.
	Frequency Plot	Understand location, spread, shape, and patterns of data.
	Shewhart Chart	Distinguish between special and common causes of variation.
Understanding Relationships	Two-Way Table	Understand cause-and-effect for qualitative variables
	Scatter Plot	Analyze the associations or relationship between two variables; test for possible cause-and-effect.
Project Management	Gantt Chart	Organize the project tasks over time with key milestones identified.
	PERT Chart	Display the sequential relationships of the project tasks and determine the critical path.
	Work Breakdown Structure	Develop a hierarchical relationship between the tasks on a project.