

## Methods and Tools for Improvement<sup>1</sup>

CATEGORY	METHOD OR TOOL	TYPICAL USE OF METHOD OR TOOL
<b>Viewing Systems and Processes</b>	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.
<b>Gathering Information</b>	Form for Collecting Data	Plan and organize a data collection effort.
	Surveys	Obtain information from people.
	Benchmarking	Obtain information on performance and approaches from other organizations.
	Creativity Methods	Develop new ideas and fresh thinking.
<b>Organizing Information</b>	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.
<b>Understanding Variation</b>	Quality Function Deployment (QFD)	Communicate customer needs and requirements through the design and production processes.
	Run Chart	Study variation in data over time; understand the impact of changes on measures.
	Control Chart	Distinguish between special and common causes of variation.
	Pareto Chart	Focus on areas of improvement with greatest impact.
	Frequency Plot	Understand location, spread, shape, and patterns of data.
<b>Understanding Relationships</b>	Scatterplot	Analyze the associations or relationships between two variables; test for possible cause-and-effect.
	Two-Way Table	Understand cause-and-effect for qualitative variables.
	Planned Experimentation	Design studies to evaluate cause-and-effect relationships and test changes.

<sup>1</sup> Associates in Process Improvement, (August 2007). *The Improvement Handbook: Model, Methods, and Tools for Improvement*. Austin, Texas.