

## Class Vocabulary

Term	Definition
<b>affinity diagram</b>	A tool used to organize different data or ideas into categories. Affinity diagrams are sometimes used in brainstorming.
<b>cause and effect diagram</b>	A graphical tool used to find root causes. Cause and effect diagrams are also called fishbone diagrams.
<b>continuous data</b>	Data that can be measured on a scale and compared with other data. Also known as variable data, continuous data can be added to or subtracted from other continuous data.
<b>control chart</b>	A graph that charts data and provides a picture of how a process is performing over time. It includes the upper and lower limits within which the process should operate.
<b>control plan</b>	A document that sets the limits within which the process should operate. This tool lists specific process activities and then states the variables or risks affecting them, as well as their specifications.
<b>critical to quality</b>	Specific, measurable characteristics of a product or process that are identified by customers as necessary for their satisfaction.
<b>critical-to-quality tree</b>	A Six Sigma tool used in the define stage to determine which key measurable characteristics of a product or process are most important to the customer and which areas of the process impact those characteristics.
<b>current sigma</b>	A calculation that determines the current number of errors per million opportunities that are occurring within a process.
<b>data collection plan</b>	A document that defines all the details concerning data collection, including how much and what type of data is required and when and how it should be collected.
<b>defect</b>	The total number of failed opportunities or requirements, such as 12 parts with misshapen holes or 10 parts with scratches.
<b>deliverable</b>	A product of the process that usually contains conclusions or outcomes.
<b>discrete data</b>	Data that represents an individual characteristic or a count. Also known as attribute data, discrete data cannot be added to or subtracted from other discrete data.
<b>DMAIC</b>	Six Sigma's five steps for process improvement. DMAIC stands for define, measure, analyze, improve, and control.
<b>external customer</b>	An outside organization or individual that receives a product or service from the company.
<b>fishbone diagram</b>	A graphical tool used to find root causes. Fishbone diagrams are also called cause and effect diagrams.
<b>FMEA</b>	A document that defines the new process or solution with requirements and includes potential causes and effects of failure along with a prediction of the likelihood of their occurrence. FMEA stands for "failure modes and effects analysis."
<b>frequency distribution checklist</b>	A data-collection document that shows the number of occurrences of observational data in order from least to greatest. Frequency distributions best represent continuous data.
<b>histogram</b>	A visual graph that shows the frequency of a range of variables.
<b>implementation plan</b>	A document similar to the project charter that documents changes and outlines the details of the new process.
<b>internal customer</b>	A department or individual within the company that relies on others to satisfy the external customer. In a multi-step process, the next step in the process is always the internal customer.
<b>measuring system analysis</b>	The methods used to verify and monitor the accuracy and quality of a measuring system using statistical study of repeated tests of the gages and other parts of the system. MSA

	tools identify the amount of variation in the gage by isolating the measurement variation from the process variation.
<b>opportunity</b>	A requirement or product specification, such as size, that may or may not be met. Any specification is an opportunity for error.
<b>Pareto chart</b>	A bar chart that shows the order of the most frequently occurring errors or sources of errors. Pareto charts best represent discrete data.
<b>pie chart</b>	A circular chart that is cut into slices that represent the frequency of the collected data. The bigger the slice, the higher the number or percentage. Pie charts best represent discrete data.
<b>problem statement</b>	A phrase or sentence used on a cause and effect diagram to explain the issue.
<b>process map</b>	A flow charting method that uses general symbols and arrows to show the flow of the manufacturing process.
<b>project charter</b>	A document on which the entire Six Sigma project is based. A project charter outlines the problem, lists the project goals, and spells out the details of the project.
<b>regression analysis</b>	An exercise that uses data to find predictors for a particular outcome by changing process variables or combinations of variables to uncover the sources of problems.
<b>root cause analysis</b>	A study undertaken to find the first or underlying cause of a problem. Root cause analysis involves the collection and study of data to determine a true cause to a problem.
<b>run chart</b>	A graphic representation of process performance data tracked over time. Run charts best represent continuous data.
<b>scatter diagram</b>	A chart that shows the relationship between two variables.
<b>simulation software</b>	A sophisticated computer program that can make changes to a process within an artificial environment.
<b>SIPOC diagram</b>	A tool used to identify and categorize the parts of a process as relating to either the suppliers, inputs, process, outputs, or customers.
<b>Six Sigma</b>	A process improvement method that uses data to identify problems and point to improvements. Six Sigma's goal is to reduce the number of defects to less than 3.4 defects per million opportunities, which is near perfection.
<b>storyboard presentation</b>	A meeting in which a series of diagrams illustrating the new process or a particular change are presented.
<b>tollgate</b>	A step within the DMAIC process that must be successfully completed before the team moves on to the next step. The team judges the completeness of each step during the tollgate review.
<b>tollgate review</b>	A meeting of the Six Sigma team in which the members determine whether or not the work within a DMAIC step was performed as stated and the goals successfully achieved.
<b>unit</b>	The part of the sigma formula that represents the part or item in question.