

| Tool | Define Stage | Measure Stage | Analyze Stage | Uses |
|---------------------------|--------------|---------------|---------------|---|
| 5 Whys | | | | Best basic tool for getting to the root cause of a problem. I have also used it at many different times to sell ideas. When you hit resistance such as "We've always done it that way." The 5 Whys can help break down the barriers. |
| Bar charts | | | | Use to measure differences between specific data sets. |
| Brainstorming | | | | Should be used to develop ideas at any stage in the process. Good tool to break logjams when the team seems to have stalled. |
| Charter | | | | This is a living document. You need to review it at every stage and modify it according to changing needs especially those resulting from VOC. |
| Critical to Quality (CTQ) | | | | Use this to identify what it will take to deliver the customers' requirements. Revisiting them in each stage especially if the VOC has changed is a good safety check. |
| Data Gather | | | | You should be gathering your baseline data in the early stages but you may want to or need to go back and gather additional data to help confirm your assumptions, further refine them, or verify your progress. Remember to KISS it. |
| Gantt Chart | | | | You create it at the beginning of the project but you need to revisit it continuously because it measures your progress. If it needs to be modified, use a scope change process. |
| Histograms | | | | Use these to measure and analyze your baseline data. But they are also useful in later stages as will be discussed in future posts. |

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| House of Quality (HOQ) and Product and Process Development (PPM) | | | | A great tool for complex analyze for root causes and for new product development. Unless you are experienced with this tool, do not attempt to use it. |
| Line charts | | | | Use these to measure and analyze your baseline data. But they are also useful in later stages as will be discussed in future posts. |
| Measure and Display | | | | Once you have your baseline data, you can start to track progress and display the results. |
| Pareto charts | | | | Use these to measure and analyze your baseline data. But they are also useful in later stages as will be discussed in future posts. |
| Scope Change Request | | | | Use these EVERY time you have to change the project's scope. |
| Swim Lane Flowchart | | | | Use these to measure and analyze your baseline data. But they are also useful in later stages as will be discussed in future posts. |
| SWOT | | | | Use to determine your initial strengths, weaknesses, etc. then as you go forward; consider using to analyze data and potential solutions. |
| Voice of the Customer (VOC) | | | | In my experience VOC should be revisited continuously throughout the project. Checking in with the customer as you go along will help ensure that you are still on the right track. |