

# Collecting data is the first step to solution

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Many a times when the problem comes, our first reaction is to work out a solution. Many people, who are trained to curb this tendency and work out a solution through careful analysis of the problem, want to get hands on the data related to the problem. However, the data collection is perceived by the working people as hindrance to normal work. It is normally evident from the resistance offered to data collection exercise. Tally charts are an effective way to negotiate this resistance.

## Tally Charts

### What ?

Tally charts are an effective way to collect data when the value of a defect or problem is important.

### Why?

By establishing the facts about the value of failures, a team can plan to identify the causes of failure and look for ways of removing them. Actions are taken on the basis of evidence, not feeling.

Tally charts are an excellent way of involving people in all areas in quality improvement.

They provide a simple method of data collection that can be easily understood and applied in office and work areas.

### When?

Tally charts are used during problem definition when the current situation is being understood.

These are also used after the solution is implemented to monitor the work post improvement & to check the effectiveness of actions.

### How?

5 simple steps to create a tally chart

1. Finalise & agree (in a team setting) to what data needs to be collected. This is the most important step as it ensures that the data will be suitable for the analysis later. It also pools in the team consent.
2. Design the tally chart. Important things to keep in mind while designing the tally charts.
  - a. Simplicity: it should be in simple format
  - b. Language should be understood by the user. Vernacular language may be used wherever required.
  - c. Ease of use: columns & rows should be easily distinguishable & must be appropriate for the anticipated data.
3. The designed tally chart should be tested prior to use. It is good idea to take inputs from people other than those involved in the design. Users may be involved to check the ease of usage.
4. Design a master tally chart.
  - a. When the data is to be collected at more than one location or, by more than one person, it will need to be collated at the analysis stage.
  - b. The way to do this is to use a master chart.
5. Collect the data.

### **Benefits**

A well designed tally chart makes it easy to collect data in a non-intrusive manner.

It also guides solutions through visual examination of data for simple problems.

For complex problems it provides input to analytical tools & methods.

**Example**

The following chart was designed to capture data related to customer calls.

| Type of call | Tally Marks | Freq. |
|--------------|-------------|-------|
|              |             | 8     |
|              |             | 5     |
|              |             | 10    |
|              |             | 6     |
|              |             | 6     |
|              |             | 9     |
|              |             | 12    |
|              |             | 3     |
|              |             | 7     |
|              |             | 4     |
| Total        |             | 70    |

This data was later used to plan the correct response to the listed issues.