

Goals and Key Performance Indicators

For the Anodize case study introduced in the previous video, the problem relates to low yields for the black anodize process. The team has developed a problem statement to clearly define the problem. The next steps are to establish a project goal and to determine how progress towards the goal will be measured.

A project goal defines how much of an improvement is expected, and by when. Clearly defined and agreed-upon goals are important for many reasons. They provide a target, they focus the team's efforts, and they point everyone in the same direction.

They also provide a means to evaluate whether the team has been successful in solving the problem. Here is the goal for the anodize scenario: Improve the black anodize process yield from 19% to a minimum of 90% by July (a six-month timeframe). Notice that this goal statement includes four key elements: the characteristic that will be measured (anodize process yield), the current state (19%), the desired or future state (90%), and the time frame, which includes the month and the year.

Let's talk a little about the first element of the goal, the characteristic that will be measured. This characteristic is called a key performance indicator, or KPI. A KPI provides a direct measure of the problem that the team is trying to solve.

Here are some typical project KPIs: Yield (the percentage of acceptable product), Cycle time (for example, the number of days or hours to assemble a finished product), Elapsed time (measured as the amount of time between events), Proportion of parts scrapped, Proportion of product out of specification, Proportion of finished goods returned.

The problem statement, project goal, and KPI can be summarized in a project charter. Typical project charters also include information about the business case, the project scope, and the project team. As an example, here is the project charter for the Anodize scenario.

The business case is a statement of why the project is important to the business. It can include information related to how the project supports key business metrics, and the financial implications of the project.

The project scope defines the area of focus for the project. This includes what is within the scope of the project, and what is outside of the scope. The project team includes team members, along with sponsors and others that are directly involved in the project.

In this charter, there is additional information defining the KPI, and how it will be measured. You revisit this scenario again in the next lesson, Defining the Process. To see many of the steps that the team took to solve the problem, see the Anodize Case Study at the end of the Design of Experiments module.