# **HOW TO WRITE A PROBLEM STATEMENT**

### **SUMMARY**

- A problem statement is a clear description of the issue(s), it includes a vision, issue statement, and method used to solve the problem.
- The 5 'W's can be used to spark the discussion about the problem.
- A problem statement expresses the words that will be used to keep the effort focused and it should represent a solvable problem.

### **How to Write a Problem Statement**

A problem statement is a clear concise description of the issue(s) that need(s) to be addressed by a problem solving team. It is used to center and focus the team at the beginning, keep the team on track during the effort, and is used to validate that the effort delivered an outcome that solves the problem statement. It has a specific form:

- Vision what does the world look like if we solve the problem?
- Issue Statement one or two sentences that describe the problem using specific issues. It is not a "lack of a solution" statement. For example, our problem is that we don't have an ERP system.
- Method the process that will get followed to solve the problem. For example, DMAIC or Kaizen.

## How to get started

The 5 'W's - Who, What, Where, When and Why - is a great tool that helps get pertinent information out for discussion. From the <a href="[poem]">[poem]</a> [2] from Rudyard Kipling's "The Elephant's Child" which opens with:

I keep six honest serving-men (They taught me all I knew); Their names are What and Why and When And How and Where and Who.

**Who** - Who does the problem affect? Specific groups, organizations, customers, etc.

**What** - What are the boundaries of the problem, e.g. organizational, work flow, geographic, customer, segments, etc. - What is the issue? - What is the impact of the issue? - What impact is the issue causing? - What will happen when it is fixed? - What would happen if we didn't solve the problem?

When - When does the issue occur? - When does it need to be fixed?

Where - Where is the issue occurring? Only in certain locations, processes, products, etc.

**Why** - Why is it important that we fix the problem? - What impact does it have on the business or customer? - What impact does it have on all stakeholders, e.g. employees, suppliers, customers, shareholders, etc. Each of the answers will help to zero in on the specific issue(s) and frame the Issue Statement. Your problem statement should be solvable. That is, it should take a reasonable amount of time to formulate, try and deploy a potential solution.

# Example

Consider a software development and hosted data services company that supplies products and services to wireless carriers. They had issues deploying new software releases into the production environment. Deployment in this case is the work necessary for taking a production ready binary and installing, testing and releasing it into the production environment. The company failed to deploy the releases on-schedule over 50% of the time.

## **Problem Statement:**

We want all of our software releases to go to production seamlessly, without defects, where everyone is aware and informed of the outcomes and status. (Vision)

Today we have too many release failures that result in too many rollback failures. If we ignore this problem; resources will need to increase to handle the cascading problems, and we may miss critical customer deadlines which could result in lost revenue, SLA penalties, lost business, and further damage to our quality reputation. (Issue Statement)

We will use our Kaizen Blitz methodology in evaluating the last release to help us improve our processes. (Method)

# Conclusion

A problem well stated is half solved, Wally Davis [3] taught me that one. And he's right, the better the clarity around what the team is attempting to fix, the more efficient they'll be in solving the problem, the solution will better 'fix' the issues, and the team can get back to executing the business versus fixing it.

**Source URL:** <a href="http://www.ceptara.com/blog/how-to-write-problem-statement">http://www.ceptara.com/blog/how-to-write-problem-statement</a>