What's your problem?

The importance of an effective Problem Statement

By Tamara Pomerantz

Has your organization jumped into a project, only to realize it didn't improve the situation because the implemented change really wasn't related to the actual problem?

Or maybe something like this has happened at your organization?

> *EveryCity Healthcare ran a project to implement a new application. However, stakeholder participation throughout the project timeline was a struggle and adoption of the system was poor. When stakeholders asked why they had to change and use the new system, no one could provide a meaningful answer.*

When we don't achieve desired value, often there is misalignment between the solution (project) and desired result (problem we want to solve).

We may think our problem is that we don't have a specific application or function, which is preventing us from achieving a desired state or outcome. But after implementing that application or function, we realize we still haven't achieved the desired outcome.

Somehow during the selecting, contracting, and project implementation process we lost sight of the Why.

There is a **misalignment of expectations** because there was an assumption that not having the application or function was the problem, when really that was the assumed solution to the problem.

Without fully clarifying and articulating the actual problem (the Why) the scope of the project fell short or was just wrong.

Problem Statements

Understanding the problem ensures we create a complete solution as part of the project. When we don't clarify the problem:

- The project scope can be incomplete or become fully disconnected from the business reason for which the project was requested and selected.
- The project objectives and outcomes may not relate to the business need – you may achieve value, but it isn't the value or solution really needed to address the initial problem or situation that drove the project request.

Better strategy and organization can be applied to decisions and planning by first confirming the Problem Statement behind the purpose of the project.

- Clarify the Problem before deciding a tactical solution, like investing in IT, implementing a function or process, or approving a project.
- Before taking action, validate assumptions and investigate current conditions before identifying resources and solutions.

Follow the steps to go from problem to resolution:

1. Identify warning sign, symptom, issue, or need
2. Define the high-level problem or business case
3. Break down the problem
4. Determine the actionable problems (the things that can be addressed)
5. Identify root cause(s)
6. Identify resources and actions to be taken

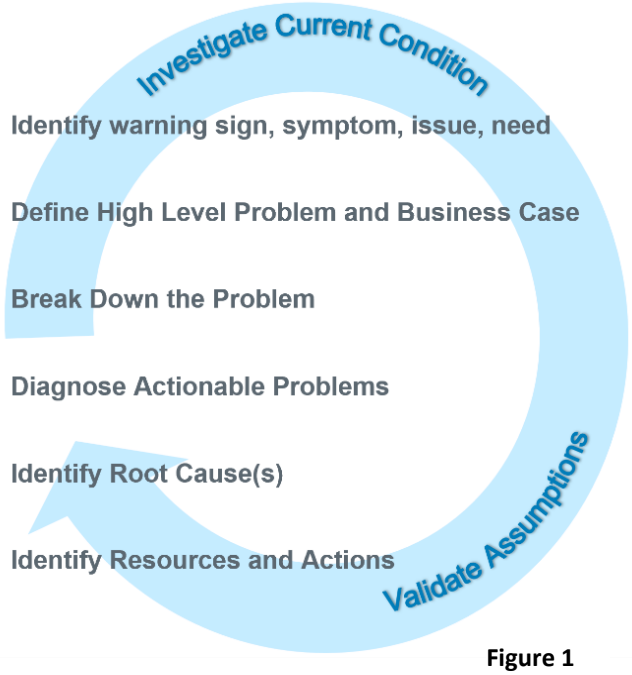
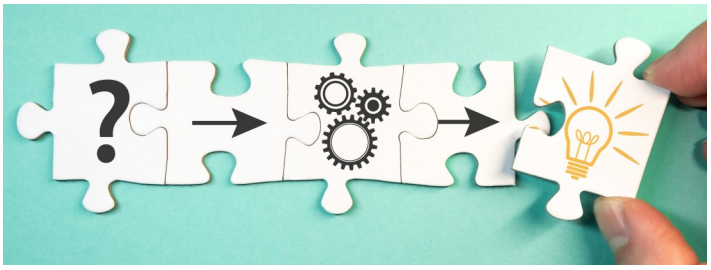


Figure 1



Value from knowing the problem

Knowing the exact problem you are trying to solve supports better communication of what you want to accomplish (specific goals and objectives), confirms the request is being made for the right reasons, and provides a way to define what success "looks like" through target conditions and metrics to measure value and benefits.

Additionally, knowing the problem ensures methods used to evaluate and select projects are appropriate and focused on the defined need. Whether evaluation includes presentations, product demonstrations, reference calls, or quote and contract development, you can confirm the scope and functionality provide improvement for the problem. And decrease the time and resources spent evaluating something that doesn't address the actual need.

Problem response

Without a good problem statement, we may not resource and act wisely. Understanding the impact of a problem supports assigning the appropriate response priority and work effort, as illustrated in Figure 2.

Answer the following questions, "Is the problem contained and isolated enough to live with?" And "Can we utilize an existing a work around to close a gap?"

A "yes" answer to either question may enable a simpler response to resolve the problem. If the answer is "no" to either question, then a more resource intense solution or innovation will be required to improve the situation.

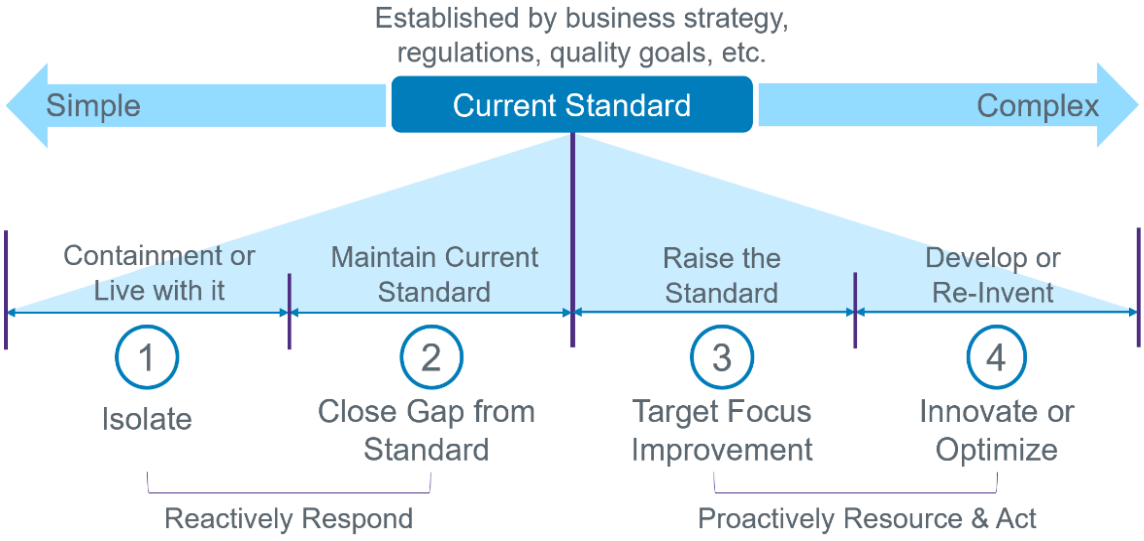


Figure 2

Writing the Problem Statement

A strong problem statement includes three elements:

1. What – the description of the problem and its magnitude or impact
2. Where and when the problem was identified as occurring
3. How is the problem measured – the metrics used to quantify or understand the impact

A problem statement should avoid including root causes or assumptions, prescribing solutions, stating opinions, or assigning blame.

"Lack of" statements are often a solution masquerading as a root cause. Replace "lack of" with what you're seeing and experiencing.

Lack of statement	Real issue
Lack of training	Level of operator knowledge too low
Lack of procedures	Procedures do not exist or are not being followed
Lack of staffing	Workload doesn't match staff level
Lack of adoption	Customers are not using products

Correlation versus Causation

An effective problem statement can also help us distinguish correlational or causational elements of the problem.

It's easy to jump to solutions because we think the quicker we find a solution the quicker we can resolve a situation, but that can lead to assumptions and the wrong path. Understanding the actual problem is essential to ensuring we are not mistaking a correlation with causation.

Correlation occurs when there is a relationship or pattern between two things but changing one does not directly impact or create a change in the other. Correlations may be superficially without there being a true or significant connection.

Causation occurs when there is a direct relationship between two things; and changing one causes a change in the other.

Correlations can lead to assuming a problem is being caused by something when there is only a loose or indirect relationship. Knowing if there is a meaningful correlation or actual causations can help you determine if a requested change is the right thing to do. Ask yourself:

- Will the requested change really improve or correct the problem; will it only address symptoms of the problem; or will it do nothing to alleviate the problem?
- Are we being tricked by a superficial or limited correlation between the request and the problem?

Problem versus Opportunity

Effective solutions to problems can also lead to great opportunities, but don't confuse taking advantage of an opportunity with solving the initial problem. Read our real world examples from organizations that took advantage of a great opportunity but failed to solve their actual business need.

Two real world examples:

1. An organization realized they were not in compliance with a medication billing requirement. A potential solution required standardizing and consolidating the systems used to order and document administration of medications. This particular solution provided the opportunities of improving patient medication safety and decreasing software license and support costs. However, when the change was implemented the project scope focused on the opportunities identified and forgot to confirm the actual problem, non-compliance with medication billing, was outlined in the scope. After significant capital investment, the organization received great value but didn't solve their original targeted problem.

2. While investigating a call center response time challenge, an organization heard about an opportunity in which they could send pollen alerts to everyone within the health system community who has asthma. Leaders quickly got excited about the opportunity and invested capital and IT resources in implementing the alert functionality. The alert system created value for the community however it redirected funds and resources from addressing the call center response time problem and actually made it worse because it resulted in increased call volume.

Problem Statements – In Conclusion

Well written problem statements lead to effective goal and objective statements. Goal and objective statements clarify what you want to accomplish, how you will achieve it, and how you will know it's been accomplished. Therefore, Problem Statements should be a requirement on Request Intake forms and part of the governance process for deciding approval of a project or change.

Problem Statement	
Should:	**Should NOT:**
• Factually explain the actual problem • Address the **what, where,** and **how** *(the impact)* • Provide the foundation for outlining the desired or target condition *(not solution)* • Provide why is it important to solve	• State opinions • Prescribe solutions or assumed cause • Contain "Lack of" • Assign blame towards a team or individual

How MAKE Solutions can help

Contact MAKE for more information and assistance with incorporating effective problems statements into your organization's project selection and governance processes.

For more information

Visit our website at makesolutionsinc.com or contact Tamara Pomerantz, VP Client Operations, Tamara.Pomerantz@makesolutionsinc.com.

Test Yourself

Select an active or upcoming project for the organization and write out its problem statement.

Take our Problem Statement Challenge

For the three sets of Problem Statements below identify which is the better Problem Statement.

Which is the better Problem Statement?

Problem Statement 1	Problem Statement 2
We need Acme's Clinical Trials system functionality due to lack of ability to capture charges and bill Research patients seen at the Infusion Centers and deploy Chemo Research infusion order regimens.	Incorrect charges are being dropped and billed to Oncology Research Patient's receiving Chemo infusions at our Infusion Centers. A sample of encounters over the last year showed on a monthly basis the organization has approximately $X incorrect charges requiring approximately X man-hours to resolve and credit.

Answer: Problem Statement 2 is a better problem statement. It provides data to clarify the impact which is helpful when deciding how to prioritize the concern in relation to all other competing priorities. It also sets metrics that can be used to develop scope and measure improvement based on changes implemented by a project. Problem statement 1 assumes a solution. If statement 2 had been provided what other solutions might have been considered to resolve the problem?

Which is the better Problem Statement?

Problem Statement 1	Problem Statement 2
Acute care nurses are logging an average of X hours overtime per month due to extra time required to complete charting and perform shift handoff. Nursing complaints of burn out have also gone up X% in the last 6 months. Data shows our acute care nurses are spending an average of X hours per day on patient charting, this is X hours above the national average.	Non-essential data elements within EHR are impacting the nursing caregiver experience resulting in late charting, over time and increased complaints of burnout. We need to minimize the nursing documentation related to Flowsheet assessments by improving charting layout.

Answer: Problem Statement 1 is a better problem statement. It provides data to clarify the impact which is helpful when deciding how to prioritize the concern in relation to all other competing priorities. It also sets metrics that can be used to develop scope and measure improvement based on changes implemented by a project. Problem statement 2 assumes a solution and does not establish metrics that can be used to evaluate improvement if the requested change was implemented.

Which is the better Problem Statement?

Problem Statement 1	Problem Statement 2
Reconfiguration of anesthesia pre-operative antibiotic order plans will remove extra nursing tasks associated with them and improve Patient safety.	Pre-operative antibiotic orders across all surgical areas within the organization are being placed multiple times on the same patient encounter – both the anesthesiologist and the surgeon have the antibiotic orders on their order plans and therefore both are entering, planning and initiating the orders. This has created excess alerts, duplication and confusion in the medication administration processes by pre-op nurses and in PACU. Over the last 6 months there have been X reported events where patients were almost double dosed with antibiotics and immediate remediation is necessary for patient safety.

Answer: Problem Statement 2 is a better problem statement. It provides data to clarify the impact which is helpful when deciding how to prioritize the concern in relation to all other competing priorities. It also sets metrics that can be used to develop scope and measure improvement based on changes implemented by a project. Problem statement 1 assumes a solution.
Does the solution outlined in problem statement 1 solve what is outlined in problem statement 2 completely?