WRITING OBJECTIVE PROBLEM STATEMENTS

BROUGHT TO YOU BY:

Manufacturers Alliance
Providing Training & Education Peer to Peer

GUEST SPEAKER

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Tru Vue

✓ Where do you find problems?

✓ Why is a problem statement important?

✓ What is a problem statement?

Writing Objective Problem Statements

About Tru Vue®

- Founded in 1946 as Chicago Dial, Tru Vue has been a innovator in glazing for over 70 years.

- For over 50 years, Tru Vue has been a manufacturer of high performance glazing products dedicated to the custom picture framing and fine art markets.

- We are a leader in anti-reflective coatings, conservation-grade UV protection and specialty glazing products for these markets.
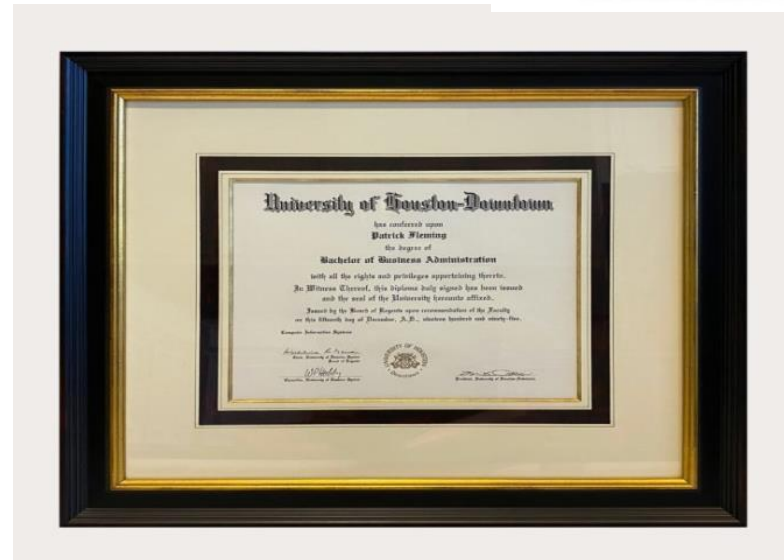
State of the Art Facilities

Our company has two facilities, one located in Faribault, Minnesota, and the headquarters in McCook, Illinois.

Product Gallery

Product Gallery

Surfacing Problems

> "No one has more trouble than the person who claims to have no trouble."
> (Claiming you have no problems is the biggest problem of all)
>
> **-Taiichi Ohno** - **Creator of the Toyota Production System**
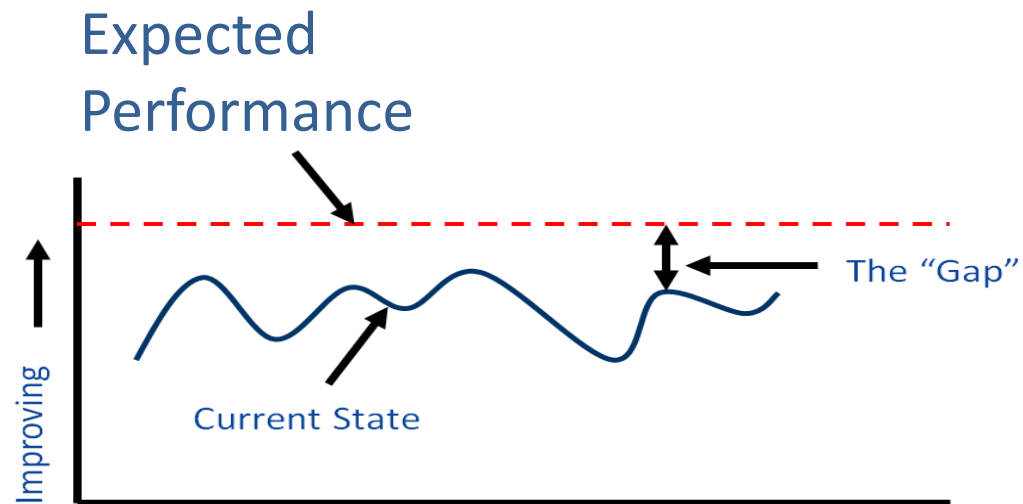
Where do you find problems?

- Key Performance Indicators (KPIs)
- Comparing activity to Annual Transformation Plan
- Customer Complaints
- Visual Control Boards
- Gemba Walks

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What is a Problem Statement?

The problem statement describes the issue that is causing a gap between our current and expected performance.

- o   Quantify the gap – Impact to the business

- o   Statement of facts - data based if possible

- o   Doesn't suggest a solution (root cause unknown)

A graph can visualize the "Gap" over a period of time and shows process variation.

Why is a Problem Statement important?

o   Focus your efforts on the <u>true issue</u>.

o   Measure the success of your countermeasure.

o   Document and communicate the problem trying to be solved.

o   Ensure the team has a common understanding of the problem.

o   Helps in reducing potential "scope creep"

What happens if you don't have a good Problem Statement?

o Team disagreement.

o Team working on the wrong countermeasure.

o No able to quantify the improvement.

o Never get to root cause of real issue

o Endless activity without closure

– **Can't measure "Success"**

Common Mistakes with Problem Statements

- o Solution embedded in the problem statement.

- o Problem statement to broad "Boil the ocean".

- o No objective.

- o The Impact to business is not clear.

Problem Statements

Each one of these conditions could be accurately described as a **spraying or leaking hose**.

Problem Statements – Cont'd

- You can see from the photos that each hose has a different failure mode:
  - Photo 1 has a leak at the connection to the hose bib
  - Photo 2 has a leak at a splice between two hoses
  - Photo 3 has an open nozzle spraying water
  - Photo 4 has a break in the hose causing water to spray out

- For example, in photo 3 a problem statement could be:

  "The hose nozzle is open and water is spraying out when under pressure"

Problem Statement

When creating problem statements, think about what people will need to know to solve the problem.

- **Who** was involved.
- **What** happened.
- **Where** it happened.
- **When** did it happen.
- Were there any **symptoms** before it happened.
- **What** was done to get started again.
- Any details that you think would benefit the team solving the problem!

- Try to answer all questions EXCEPT "HOW"
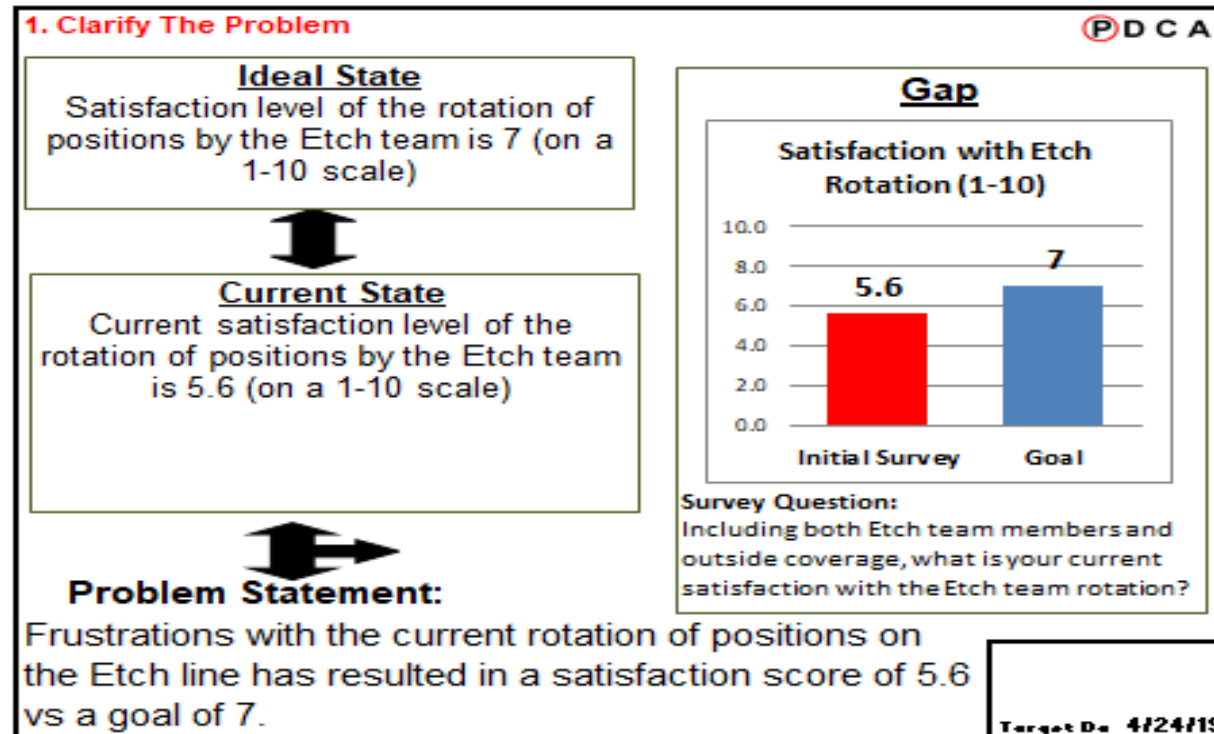
Etch Team Rotation

Problem Statement:
Etch team members do not always know their correct position in the Etch rotation at any given time.

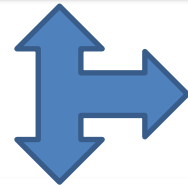**Problem Statement** – Needs help (Can't measure, business need no clear)

Objective Problem Statement

1. Clarify The Problem

ⓟ D C A

Ideal State
Satisfaction level of the rotation of positions by the Etch team is 7 (on a 1-10 scale)

Current State
Current satisfaction level of the rotation of positions by the Etch team is 5.6 (on a 1-10 scale)

Gap

Satisfaction with Etch Rotation (1-10)

Initial Survey	Goal
5.6	7

Survey Question:
Including both Etch team members and outside coverage, what is your current satisfaction with the Etch team rotation?

Problem Statement:
Frustrations with the current rotation of positions on the Etch line has resulted in a satisfaction score of 5.6 vs a goal of 7.

Target Da 4/24/19

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A Problem Clearly Defined is Half Solved

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Writing a Problem Statement

Current State
Target derived from MDI board, KPI's, Transformation Plan, etc.
(what should be happening?)

Gap
Visualize the difference between expected Performance and current

Current State
What is Actually happening?
What are the current results in relation to the expected Performance (Ideal State)?
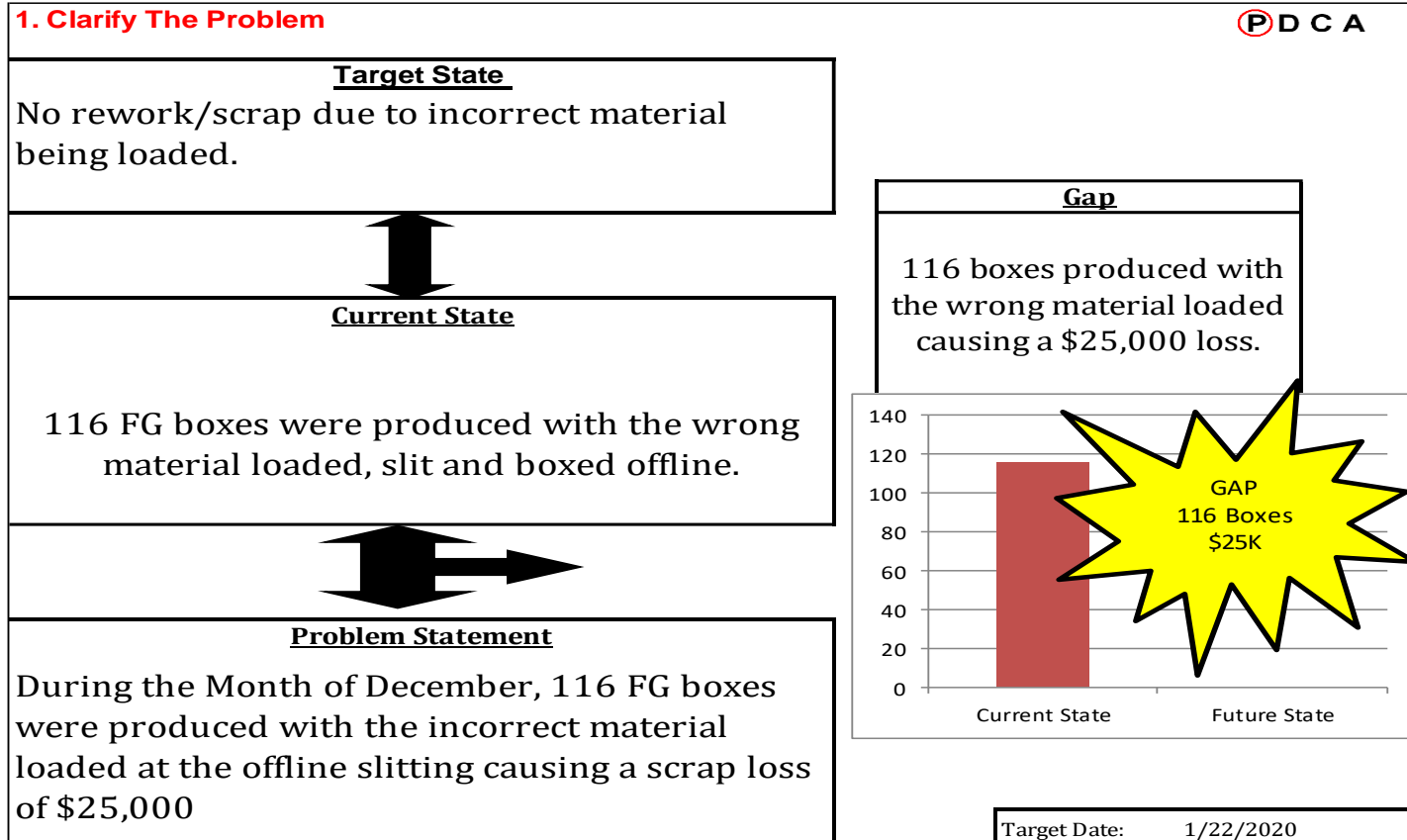(Use same metrics stated in the Ideal State)

Problem Statement
Summarize the Problem by restating the gap

Problem should be clearly evident after reading the problem statement

Problem Statement

Ⓟ D C A

Target State

No rework/scrap due to incorrect material being loaded.

Current State

116 FG boxes were produced with the wrong material loaded, slit and boxed offline.

Problem Statement

During the Month of December, 116 FG boxes were produced with the incorrect material loaded at the offline slitting causing a scrap loss of $25,000

Gap

116 boxes produced with the wrong material loaded causing a $25,000 loss.

GAP
116 Boxes
$25K

Current State   Future State

Target Date: 1/22/2020

- o Quantify the gap
- o Statement of facts - data
- o Measure the "success" of your countermeasures
- o Doesn't suggest a solution – Root cause Unknown

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Benefits of Writing Objective Problem Statement

o Remain focused on the specific issue.

o Achieve better results.

  – Can measure "Success"

o Prevent you from wasting time.

Thank You!