

---

# Problem Solving Process



2023 WEST VIRGINIA  
AGENCY PURCHASING CONFERENCE

*Celebrating 90 Years of West Virginia Purchasing*

Presented by: Samantha Knapp

---

---

# Toyota Production Support System Center



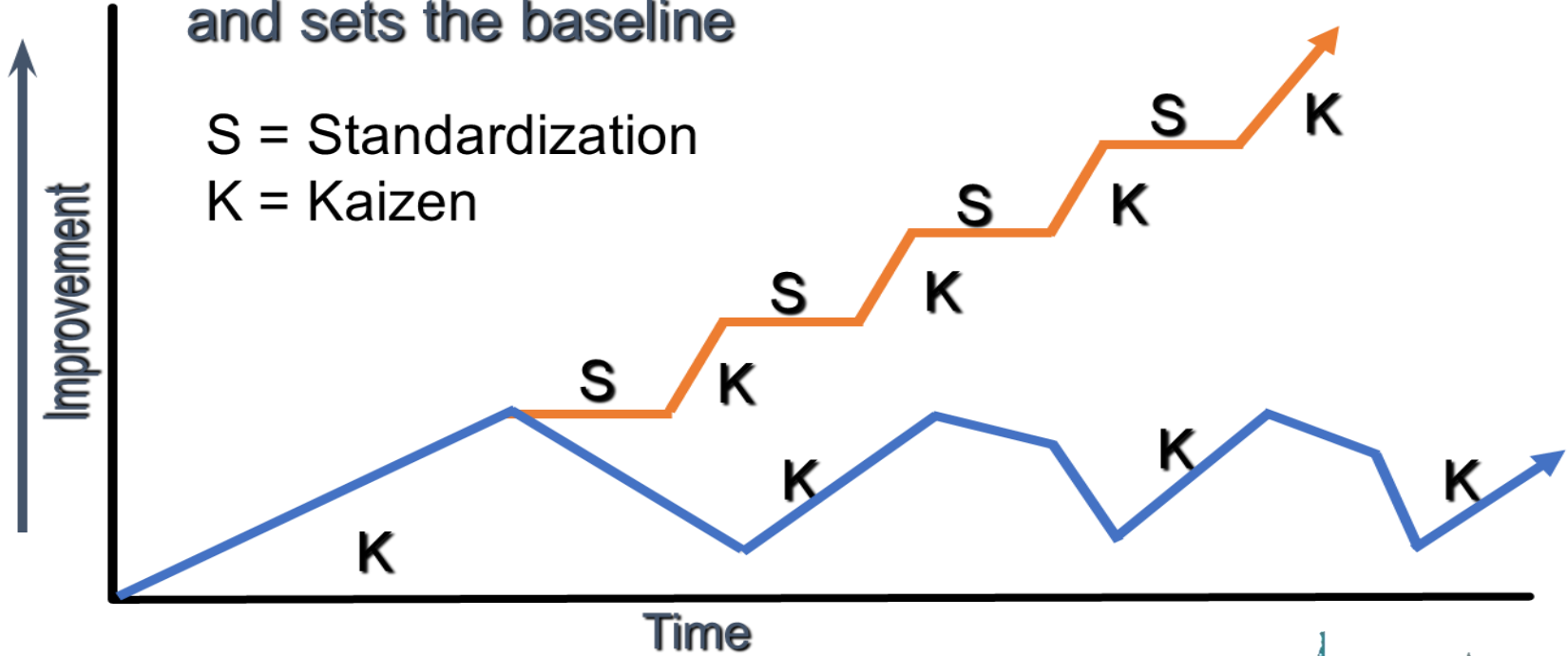
**Phase 2:** Focus on improving customer service to agency procurement officers

**Strategy:** Building a problem solving culture within the Purchasing Division

**Long term goal:** Continue to implement kaizen and standardize where possible



# Standardization helps maintain improvements gained and sets the baseline



# Eight step problem solving method

1. Clarify the problem
2. Break down the problem
3. Identify the problem statement and target statement (what is the problem and what do you hope to achieve?)
4. Root cause analysis
5. Develop countermeasures
6. Implement countermeasures
7. Monitor results and processes
8. Standardization



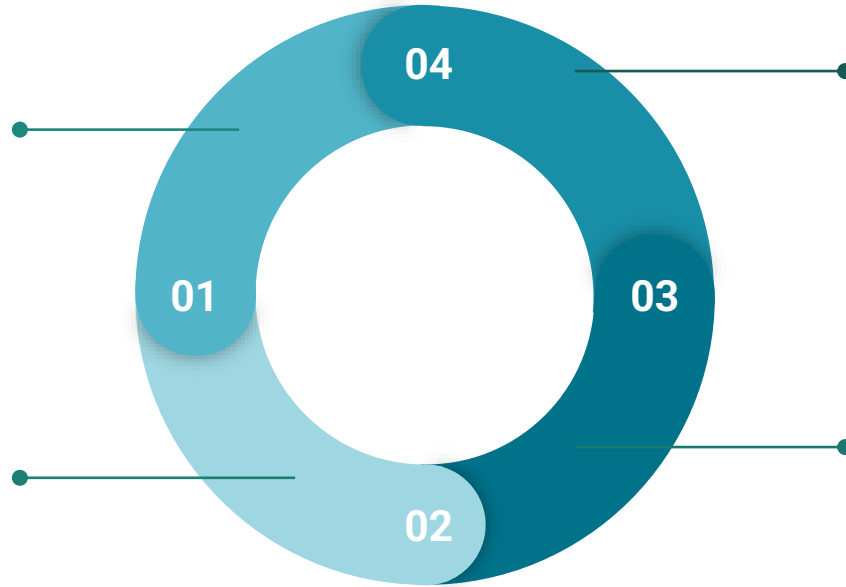
# Root Cause Analysis

## Identify problem

Problem solving process begins when your agency identifies a problem

## List out potential reasons for the problem

Ask yourself why that problem might be occurring. This is a brainstorming session.



## Identify root cause

Once you finish listing potential reasons, and rejecting those that are not most likely, you will have found the root cause. This becomes the focus of your next step.

## Reject least likely reasons

Start to narrow down the reasons until you come to one. Then ask yourself what might be the most likely reason. Again brainstorm potential reasons. Continue this process a total of three to five times.



# PROBLEM

ASK

WHY

Reason #1

~~Reason #2~~

~~Reason #3~~

~~Reason #4~~

~~Reason #5~~

ASK WHY

~~Reason #1~~

Reason #2

~~Reason #3~~

~~Reason #4~~

~~Reason #5~~

ASK WHY

~~Reason #1~~

~~Reason #2~~

Reason #3

~~Reason #4~~

~~Reason #5~~

ASK

~~Reason #1~~

~~Reason #2~~

ROOT CAUSE

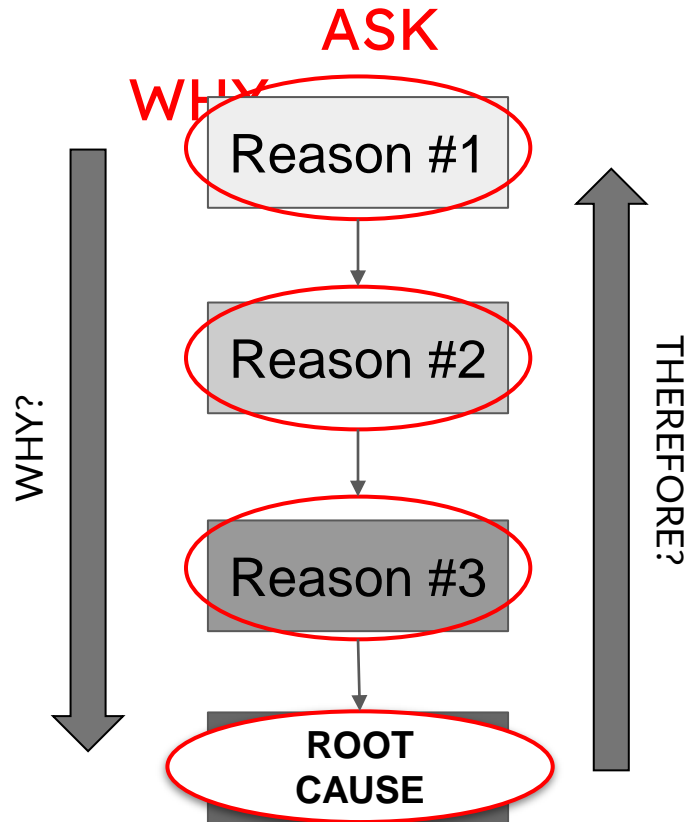
~~Reason #4~~

~~Reason #5~~

WHY



# PROBLEM



---

# Once the root cause is identified

- Brainstorm possible countermeasures
  - What are some actions you can take to remedy the problem?
- Consider these factors:
  - Time
  - Cost (true cost, including administrative time)
  - Effectiveness



Countermeasure	Time	Cost	Effectiveness
Countermeasure #1			
Countermeasure #2			
Countermeasure #3			



..... **Good**



..... **Doable**



..... **Out of reach or not appropriate**

*Continuous monitoring*



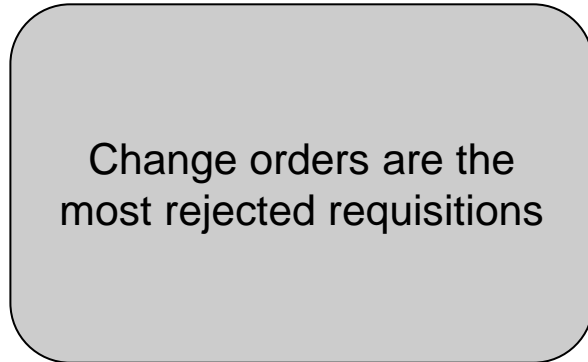
---

# Purchasing Example

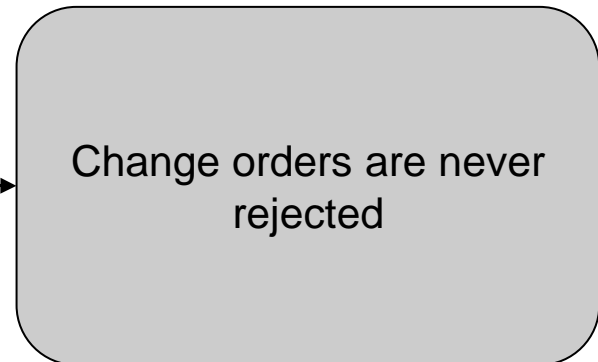
---

# Problem/Target

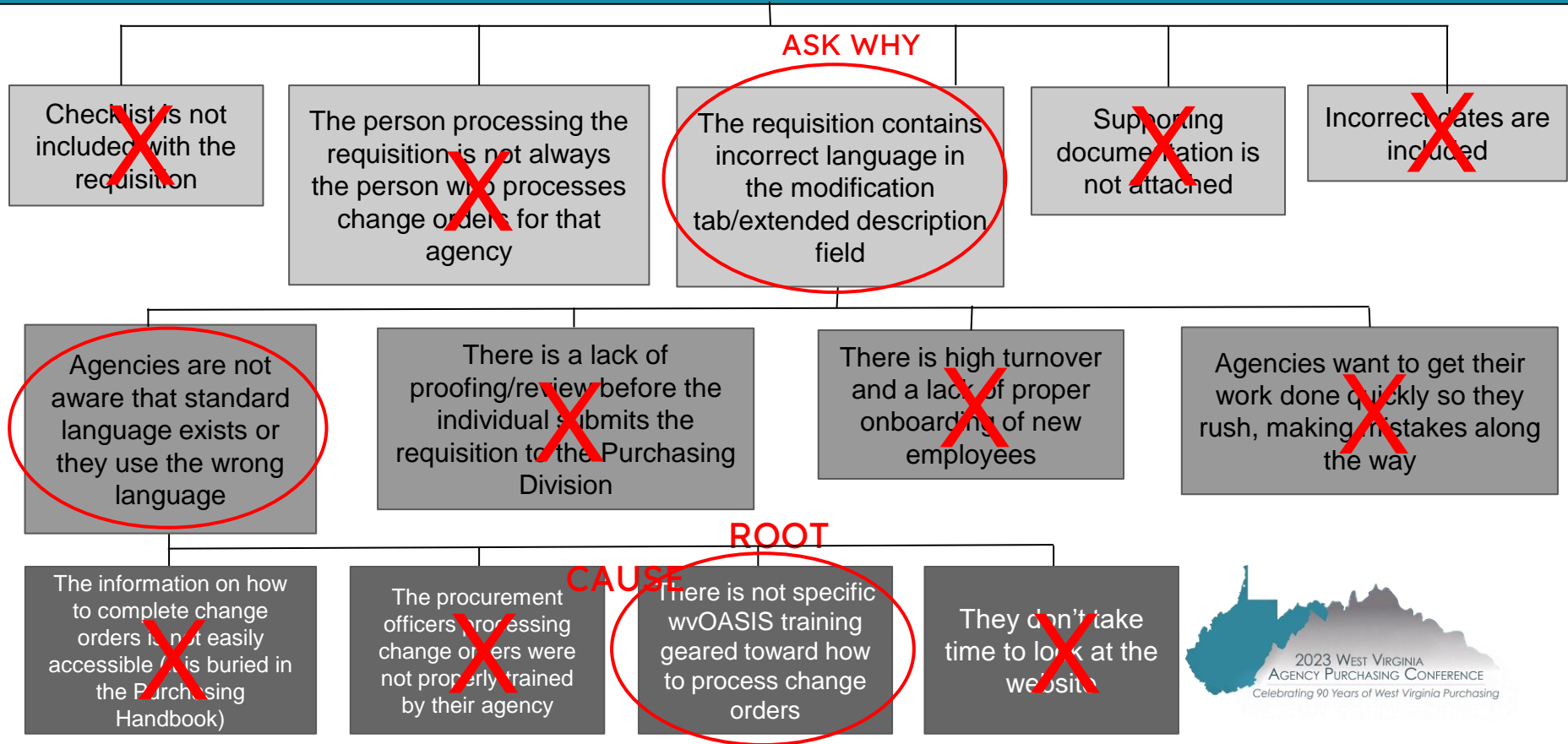
**Problem Statement:**



**Target Statement:**



# Change orders are the most rejected requisitions



Countermeasure	Time	Cost	Effectiveness	
Create a stand-alone change order document to put on the Forms webpage	●	●	●	●
Create a wvOASIS How-To recording on change orders	▲	▲	●	▲▲
Include change order information as Weekly Purchasing Tip	●	●	▲	▲

● ..... **Good**

▲ ..... **Doable**

✘ ..... **Out of reach or not appropriate**

*Continuous monitoring*



# Countermeasure #1

Create a stand-alone change order document to put on the Forms webpage

[www.state.wv.us/admin/purchase/Documents/ChangeOrderInstructionalGuide.pdf](http://www.state.wv.us/admin/purchase/Documents/ChangeOrderInstructionalGuide.pdf)

## CHANGE ORDER PROCESSING INSTRUCTIONAL GUIDE & STANDARD CHANGE ORDER LANGUAGE

Rev. 2/24/2023

This document contains instructions on how to complete the change order process, as well as minimum standard language for agency use when issuing a change order. The *Compliance Verification Requisition Submission Checklist* (a.k.a. Requisition Compliance Checklist) is required with all requisitions, as well as any required supporting documentation (i.e. two-party agreement, new pricing pages, etc.).

Agencies are encouraged to add details to the standard language as needed to clearly reflect the reason for the change. When preparing a requisition for a change order, agencies should customize the language (the *Xs* in red) with its specific change order information, fill in any blanks (\_\_\_\_), and enter the language in the specific change order's Modification Tab **AND** Extended Description field within wvOASIS. Failure to do so may result in a rejection of the requisition back to the agency.

### [Change Order Instructional Guide](#)

[Before Getting Started](#)

[Creating the Requisition in wvOASIS](#)

[General Information Tab](#)

[Modification Tab](#)

[Extended Description Tab](#)

[If Maintenance is Needed for a CCT](#)

[Terms and Conditions](#)

[Assemble Documents](#)

### [Standard Change Order Language for Renewals](#)

[Standard Renewal](#)

[Modification Tab](#)

[Extended Description](#)

[Renewal with Increase](#)

[Modification Tab](#)

[Extended Description](#)

# Countermeasure #2

Create a wvOASIS How-To recording on change orders

[https://www.youtube.com/watch?v=f0\\_AHID3BOE](https://www.youtube.com/watch?v=f0_AHID3BOE)



# Countermeasure #3

Include change order information  
as a Weekly Purchasing Tip

WEST VIRGINIA PURCHASING DIVISION

## WEEKLY TIP



### Processing Change Orders

*Each week, the Purchasing Division will send a quick tip and explanation. If you have an idea for a future tip, email [Purchasing.Division@wv.gov](mailto:Purchasing.Division@wv.gov).*

***Familiarize yourself with the change order process by reviewing the Purchasing Division's [on-demand training module on change orders](#). Then use and follow the Purchasing Division's [Change Order Instructional Guide & Standard Change Order Language](#) reference document each time you submit a change order to the Purchasing Division.***

The Purchasing Division issues as many change orders each year as it does new purchase and delivery orders. One way to expedite the change order process is to use standard change order language offered by the Purchasing Division and review the change order for accuracy prior to submitting it. To assist agencies with the change order process, the Purchasing Division created two new resources: an on-demand training with a live presentation of the process within wvOASIS, and a Change Order Processing Instructional Guide & Standard Change Order Language reference document.



---

# Activity

---

# Samantha Knapp

[Samantha.S.Knapp@wv.gov](mailto:Samantha.S.Knapp@wv.gov)

304-558-7022

CONTACT US

---