

DEVOPS CULTURE AND MINDSET

DevOps Principles: A3 Problem Solving Framework



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Learning Objectives

Discuss the **A3 Problem Solving** Framework

Explain framework **steps**

Compare A3 to **Deming's cycle**



A3 Problem Solving Framework

A3 refers to European paper size equivalent to 11 inches by 17 inches used to outline templates

A3 Problem Solving = **structured steps**

Slide 3: A3 Problem Solving Framework



A3 Steps	PDCA Cycle
Background	Plan
Problem Statement/Current Condition	
Goal/Target Condition	
Analysis	
Proposed Countermeasures	Do
Implementation Plan	Check
Follow Up Actions	Act



Step 1: Set the Background

Include statement of how problem directly **impacts** business outcomes



Step 2: Current Condition and Problem Statement

Aligned with the improvement kata language

Current **reality** = where things stand today



Step 3: Develop the Goal

Target state you are trying to **achieve**

Explain how you will measure **outcome**



Step 4: Performance Analysis

Also called Root Cause Analysis

Identify root cause, there may be multiple factors



Plan Phase: Steps 1 - 4

Spend time on the plan phase!

Great planning leads to
successful outcomes



Step 5: Brainstorm

How do you intend to reach the target condition?

Come up with a hypothesis on how countermeasure can help reach goal



Countermeasures

Decision criteria: effort vs. impact



Step 6: Implementation Plan

Enables you to check **results**

Confirms impact on current condition



Step 7: Update

Update “standard work” based on steps taken



A3 Problem Solving Framework

Creates a culture of continuous
improvement and **learning**