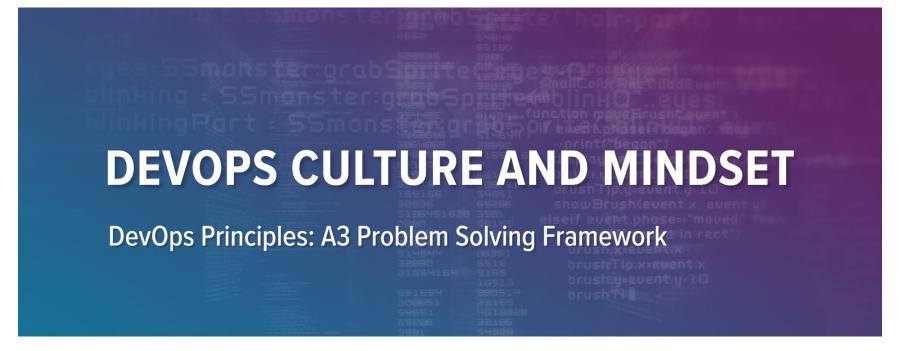
Lesson 1.6: DevOps Principles: A3 Problem Solving Framework

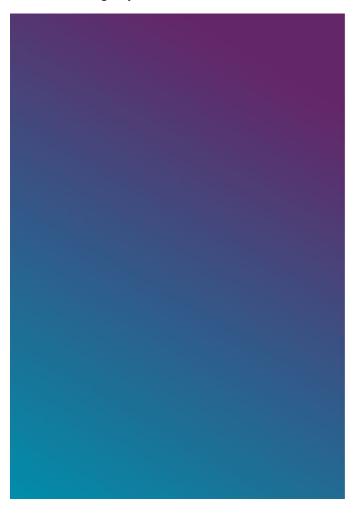




Courtney Kissler Vice President Digital Platform Engineering Nike



Slide 1: Learning Objectives



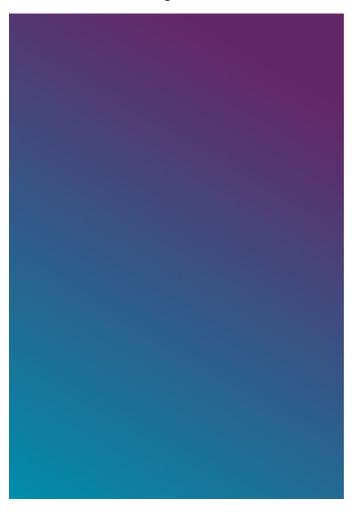
Learning Objectives

Discuss the **A3 Problem Solving**Framework

Explain framework **steps**

Compare A3 to **Deming's cycle**

Slide 2: A3 Problem Solving Framework



A3 Problem Solving Framework

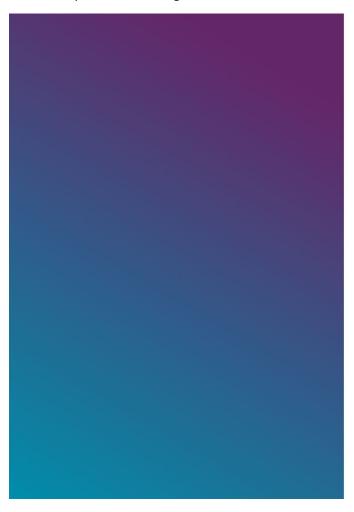
A3 refers to European paper size equivalent to 11 inches by 17 inches used to outline templates

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

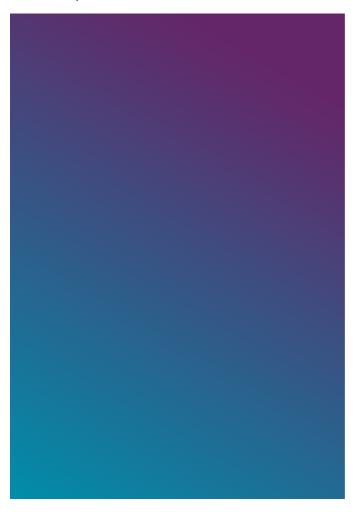
Slide 4: Step 1: Set the Background



Step 1: Set the Background

Include statement of how problem directly impacts business outcomes

Slide 5: Step 2: Current Condition and Problem Statement

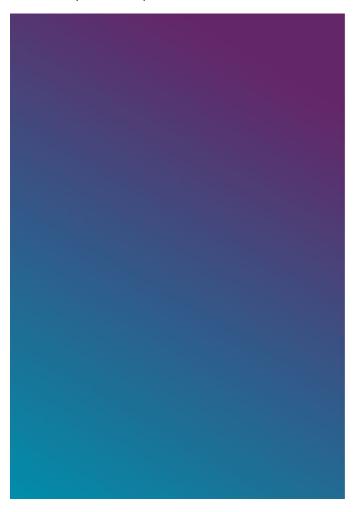


Step 2: Current Condition and Problem Statement

Aligned with the improvement kata language

Current **reality** = where things stand today

Slide 6: Step 3: Develop the Goal

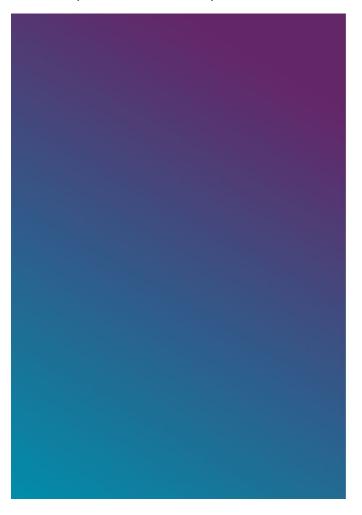


Step 3: Develop the Goal

Target state you are trying to achieve

Explain how you will measure outcome

Slide 7: Step 4: Performance Analysis



Step 4: Performance Analysis

Also called Root Cause Analysis

Identify root cause, there may be multiple factors

Slide 8: Plan Phase: Steps 1 - 4

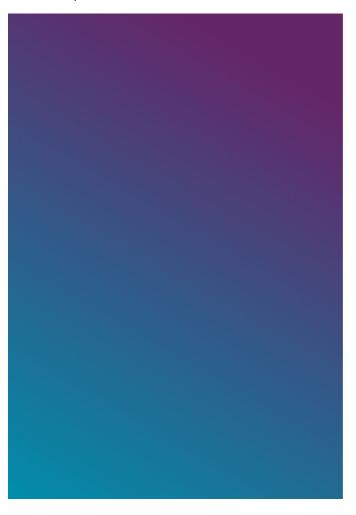


Plan Phase: Steps 1 - 4

Spend time on the plan phase!

Great planning leads to successful outcomes

Slide 9: Step 5: Brainstorm



Step 5: Brainstorm

How do you intend to reach the target condition?

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

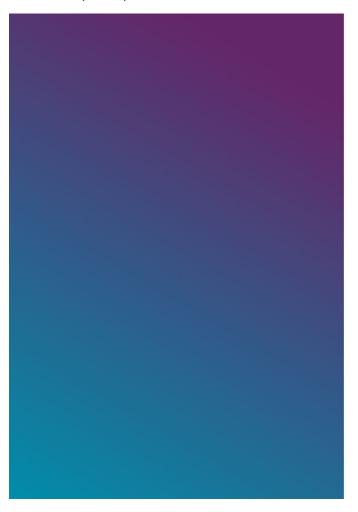
Slide 10: Countermeasures



Countermeasures

Decision criteria: effort vs. impact

Slide 11: Step 6: Implementation Plan



Step 6: Implementation Plan

Enables you to check results

Confirms impact on current condition

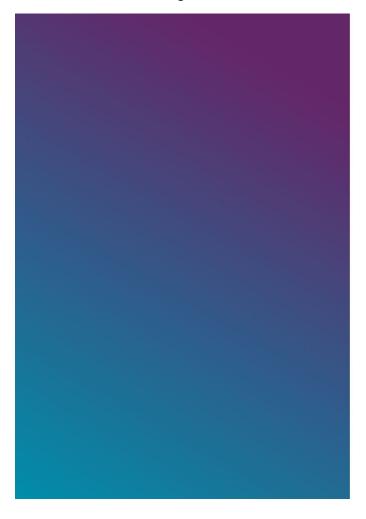
Slide 12: Step 7: Update



Step 7: Update

Update "standard work" based on steps taken

Slide 13: A3 Problem Solving Framework



A3 Problem Solving Framework

Creates a culture of continuous improvement and learning