

# System Driven Leadership

Grounded in Deming System of Profound Knowledge

## PRINCIPLES

1. Appreciation for a System
2. Knowledge about Variation
3. Psychology
4. Theory of Knowledge (PDSA)

**WHAT:** Work through Dr. Deming's 4 Principles of System Driven Leadership when trying to make sense of and improve upon a working system within your organization.

**WHY:** This process will help you understand the current state of any system, whether there is a formal system in place or an informal set of practices that have taken shape over time. By understanding how the system likely operates right now, we can begin to improve upon it using the Innovation Engineering tools and mindset. The four steps of this packet will lead you to a collection of useful and directly applicable next steps.

**WHO:** You will achieve the best results if you gather together a group of stakeholders (3-6) who work within the system.

**HOW:** All you need is this packet and a white board. Work through each step sequentially.

The process will take about 60 minutes for experienced teams. Plan for 1.5-2 hours for teams new to this exercise.

**1. Appreciation for a System:** Define the purpose and parameters of the System you are trying to “see” and improve upon.

<b>System Name:</b> Name of the System	
<b>System Aim:</b> The purpose of the system	
<b>Stakeholders:</b> Those with vested interest in the system’s operations and results	
<b>Boundaries:</b> Where it starts and stops and/or what it doesn’t include if that is not obvious.	
<b>System Metric:</b> The one thing we are focused on accomplishing, and by what measure.	
<b>Enabling Metrics:</b> The other measurable things that help us predict or achieve the overall system metric. (Hint: think about each part of the system, and how you might measure behavior or output from that part)	

Make a visible representation of your system. Map the flow of processes to accomplish your Aim. Think about the big picture. Use no more than 5 “steps” or “phases.” Use the space provided or a white board / flip chart.

**2. Knowledge about Variation:** Consider where there might be variation in the system and mark on the map with a “V”. Then list elements below and how the variance affects the Aim of the System.

Finally, consider Possible Explanations for the Variance:

- Common Cause Variation due to poor tools, documentation, training, technique
- Special Cause Variation due to mistakes, not doing job, not following procedures, external factors

	<b>Name 2 elements of the System that have variance.</b>	<b>How does this variance affect the AIM (if at all)?</b>	<b>Possible Common Cause Explanation</b>	<b>Possible Special Cause Explanation</b>
1				
2				

**3. Psychology:** Identify the Psychological Forces at play within the system.

- Positive Psychology where people are cooperating well, feeling motivated and appreciated. Mark on the map with a **P+**
- Negative Psychology where people are frustrated, fearful or demotivated. Mark on the map with a **P-**

B) Stop and Consider Possible Explanations for the Positive and Negative Forces

<b>List two examples of Positive Psychology and possible explanation.</b>	<b>List two examples of Negative Psychology and possible explanation.</b>

**4. Theory of Knowledge** - Based on the system variation and psychological forces you've identified, consider what will be your next steps; mine for stimulus, write and test ideas, define a very important system Blue Card.



**Stimulus Mining:** What information would be helpful to gather to better understand the existing system and why? (Metrics, Stakeholder Insights / Perceptions, Historical Data, etc)



**Yellow Card:** Suggest an Idea to help the people in the system better achieve the overall aim. (An idea to reduce common cause variation, eliminate sources of negative psychology, etc.)



**Blue Card:** Suggest a part of the System that might need to be completely re-invented and write a first draft of the Strategic Mission from the blue Card, "We need ideas for..."