

# *Department of the Air Force*

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*Integrity - Service - Excellence*

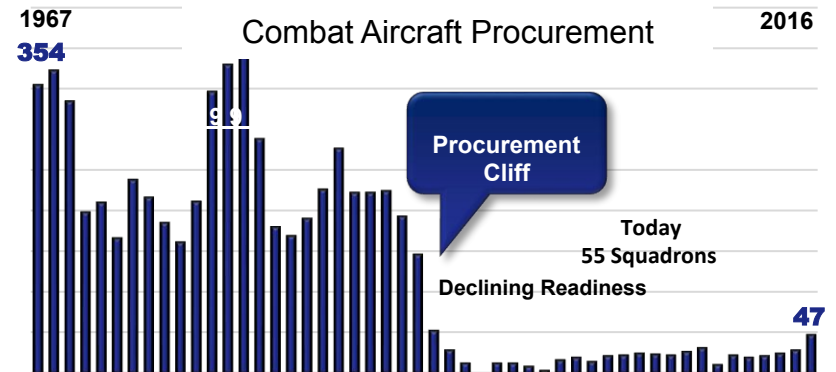
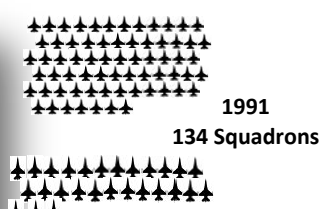
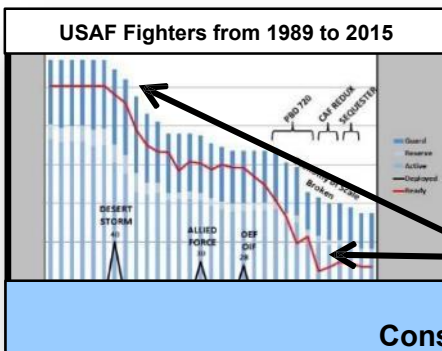
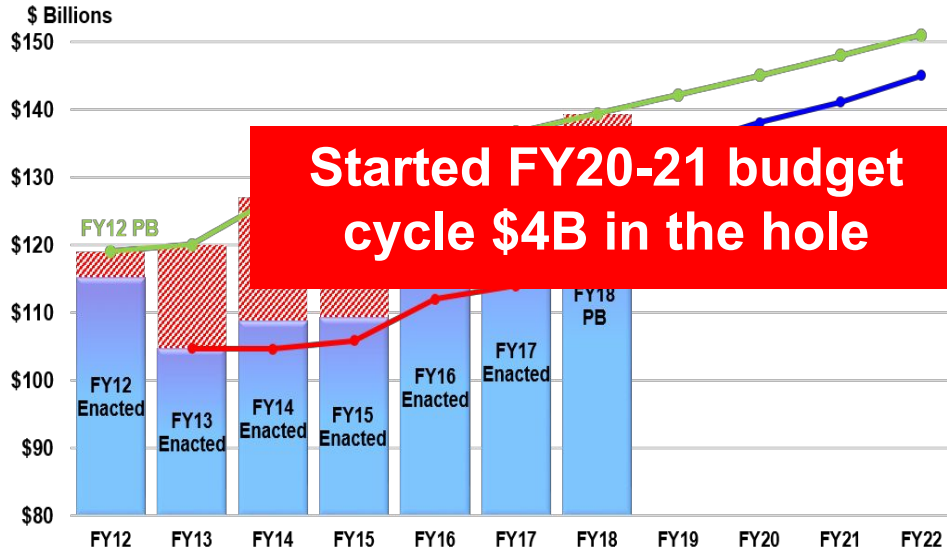
## **Continuous Process Improvement and Innovation (CPI<sup>2</sup>) in our DNA**



**W. B. (Brou) Gautier**  
**SAF/MGB – CPI<sup>2</sup>**  
**22 Jul 20**  
**Version 1.0**



# U.S. Air Force over Time



**We Must Enable a More Capable, Ready Air Force**



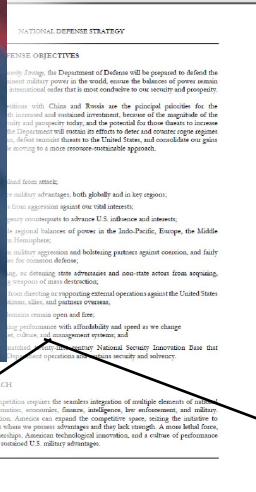
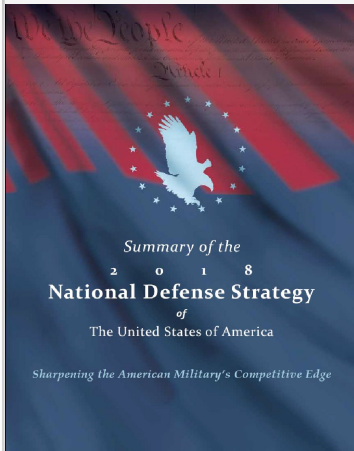
# *Raison d'être*

- **Central Tenet: World's Best Air Force is being challenged in all domains: Air, Space, and CyberSpace ...**
  
- **Considerations:**
  - **Adversary capability**
  - **Teamed adversaries ability to coordinate against us**
  - **Reflection Questions:**
    - **Do requirements (quantity and cost) exceed resources?**
    - **Does treasury have the capacity for more military spending?**
    - **How would I solve this for the Air Force?**
    - **Is every dollar of the AF budget as productive as it can be?**
    - **Is every AF asset as productive as it can be?**
    - **What do we owe the taxpayer before we ask for more?**



# National Defense Strategy Driving Reform

## National Defense Strategy (NDS)



## National Security Objectives

“Continuously delivering performance with affordability and speed as we change Departmental mindset, culture, and management systems; and...”

- Ensure effective stewardship of taxpayer dollars
- Transition to a culture of performance where results & accountability matter
- Gain full value from every taxpayer dollar spent
- Shed outdated management practices & structures while integrating insights from business innovation
- Organize for innovation
- Leverage the scale of operations to drive greater efficiency in procurement
- Pursue opportunities to consolidate and streamline contracts



# Digital Air Force

## ***A Cultural Transformation ... the Digital Air Force:***

- ▶ is the development and synchronization of **People, Processes** and **Technology**
- ▶ will enable us to rapidly and effectively **Connect, Share, and Learn**
- ▶ will allow us to be more **Agile** and **Integrated** throughout all domains
- ▶ will enable **Decision Advantage** in future conflict environments steeped in **Shared Information** and powered by **Rapid Decision-Making**
- ▶ is a **Campaign Designed for Every Airman** across all spectrums ...30-year investment decisions...aircraft maintenance...supply chain mgmt...collaborative sensing...weapons employment...Airman development continually aligns to the **NDS**, Joint, and Air Force strategies, doctrine, and plans





# *The Integration Challenge*

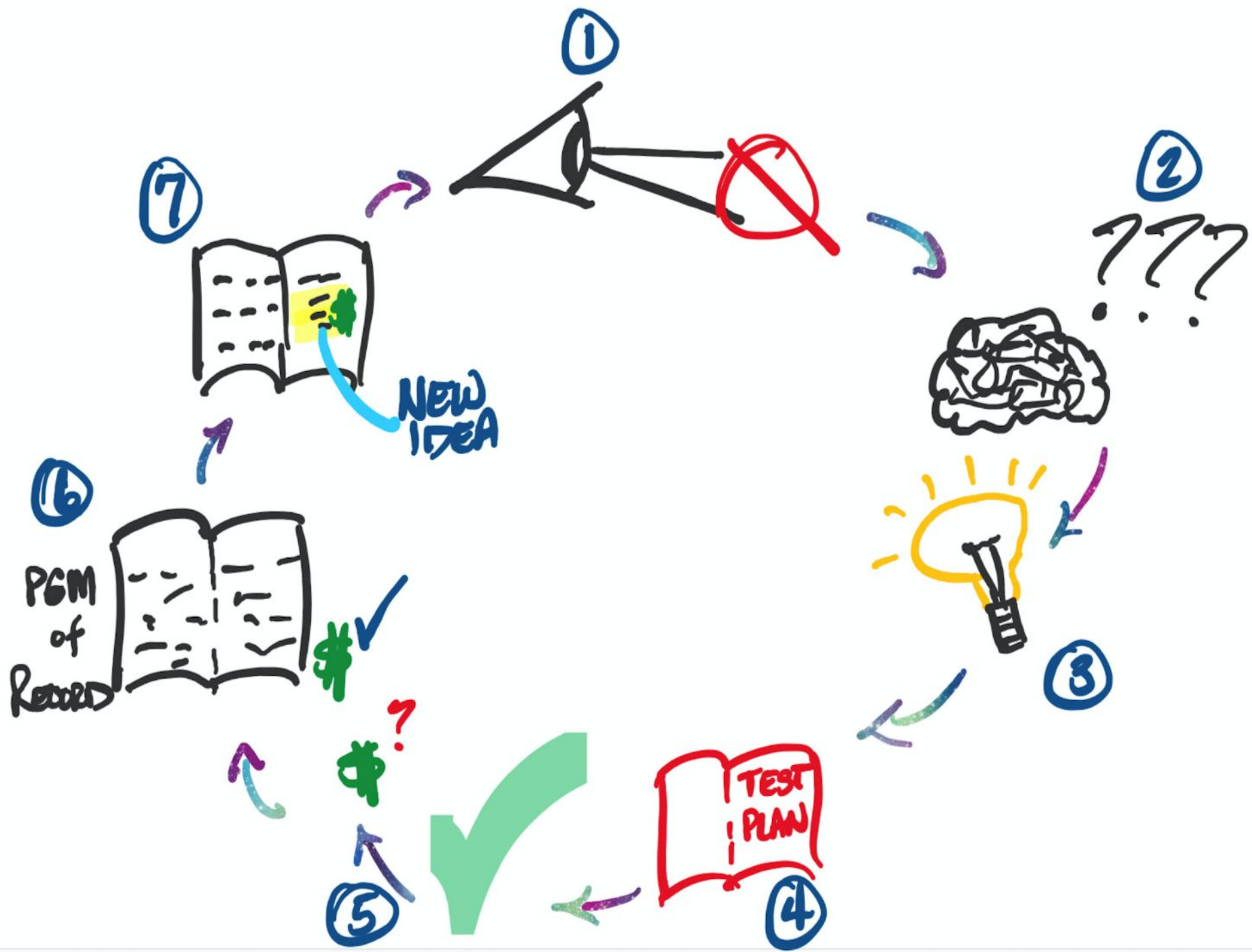
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**“In today’s complex security environment, victory goes not to the innovator, but to the rapid integrator of ideas.”**

**-General David L. Goldfein, Chief of Staff, U.S Air Force**

***But what does integration look like?***



Team Lead:  
Team Members:  
Facilitator(s):

Approval Information/Signatures:  
Objective Champion:  
Start Date: \_\_\_\_\_ End Date: \_\_\_\_\_

PROBLEM TITLE:  
**Take Action**  
Strategy Map Priorities: AF \_\_\_\_\_ Objective: \_\_\_\_\_

1. Clarify & Validate the Problem:

“Problem” ... What’s the issue and “Why do we Care?”

- Tied to improvement strategy
- Required to meet mission
- CC Tasking
- Increase capability &/or capacity

4. Determine Root Cause(s):

A focus on **cause and effect** ensures we go beyond symptoms to root cause(s)

The problem WILL COME BACK if you never ID and mitigate the root cause(s)!

6. Implement Countermeasures (use Obj Status Rpts (OSR) for project mgt):

**Project Management & Oversight**

Status reports for governance meetings

2. Break the Problem Down/Identify Performance Gap(s):

This block helps **focus the effort** very specifically in discrete, quantifiable terms (Source Data – Strategy Map Objective)

Ensures the big issues are addressed

5. Develop Countermeasures and/or Tasks:

This is the **course of action analysis and project planning “pitch”**:

Treat symptom(s)? Possibly  
Treat root cause(s)? Absolutely  
Complexity plan? (Just Do It, RIE, Longer-Term Project)  
Expected benefit (ROI)  
After approval, manage it, review at governance meetings

7. Confirm Results & Process (desired change in Step 2 data):


**Validation? Replicate and scale?**

No? Go back to **Step 4**

3. Set Improvement Target(s) (CC’s agenda/prioritization step):  
Close the entire performance gap:  
The Champion’s agenda block ... it **provides insight to criticality and urgency**

Timeline:  
Milestones:

Source Data – Command’s/  
Functional Team’s strategic goals

 Vector Ck w/ \_\_\_\_\_ scheduled: \_\_\_\_\_

8. Sustain Improvements, Standardize Locally, Elevate (track via OSR):

**CHANGE MANAGEMENT**  
**Standardize** new process and determine inspection/quality check requirements so new process doesn’t retrograde/decay



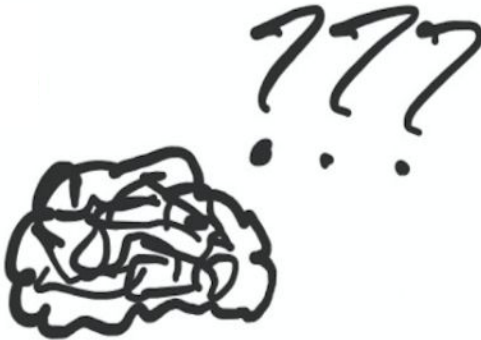


Team Lead:  
Team Members:  
Facilitator(s):

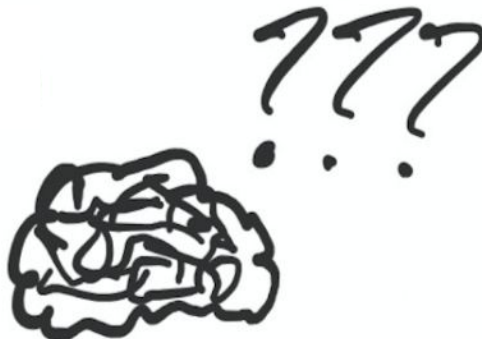
Approval Information/Signatures:  
Objective Champion:  
Start Date:                      End Date:

PROBLEM TITLE:  
**1 per strategic objective ... minimum**  
Strategy Map Priorities: AF \_\_\_\_\_ Objective: \_\_\_\_\_


1. Clarify & Validate the Problem:



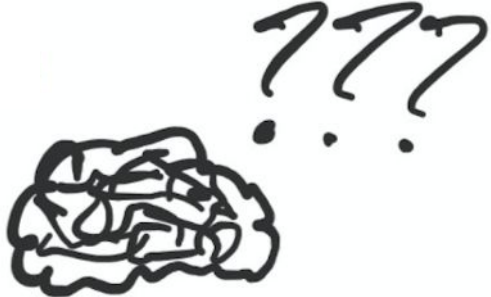
4. Determine Root Cause(s):




6. Implement Countermeasures (use Obj Status Rpts (OSR) for project mgt):



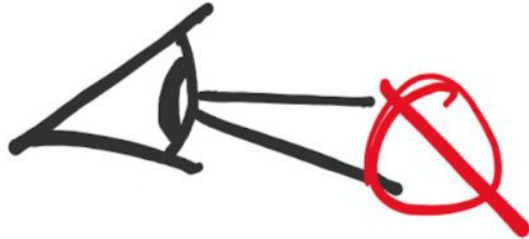
2. Break the Problem Down/identify Performance Gap(s):



5. Develop Countermeasures and/or Tests:



7. Confirm Results & Process (desired change in Step 2 data):





3. Set Improvement Target(s) (CC's agenda/prioritization step):  
Close the entire performance gap:

Timeline:  
Milestones:



Vector Ck w/ \_\_\_\_\_ scheduled: \_\_\_\_\_

5. Develop Countermeasures and/or Tests:



Vector Ck w/ \_\_\_\_\_ scheduled: \_\_\_\_\_

8. Sustain Improvements, Standardize Locally, Elevate (track via OSR):



Vector Ck w/ \_\_\_\_\_ scheduled: \_\_\_\_\_



# Is Innovation a Different Thing?

## TYPE OF INNOVATION

		Business Model	Process	Effect or Capability
DEGREE OF INNOVATION	Breakthrough			
	Substantial			
	Incremental			

**Institutional Competency – Continuous Improvement**

**Foundation Operating Philosophy is LEAN ...**

**The Relentless Pursuit of Warfighter Effectiveness through Elimination  
of that which DOES NOT Add Value**

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# Core Values



## UNITED STATES AIR FORCE CORE VALUES

1 January 1997

**Integrity** is simply doing the right thing, all the time, whether everyone is watching or no one is watching.

**Service Before Self** tells us that professional duties take precedence over personal desires.

**Excellence In All We Do** does not mean that we demand perfection in everything from everyone. Instead, this value directs us to continuously advance our craft and increase our knowledge as Airmen. We must have a passion for continuous improvement and innovation that propels America's Air Force in quantum leaps towards accomplishment and performance.



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# Air Force Continuous Process Improvement & Innovation (CPI<sup>2</sup>)

TSD

July 2020

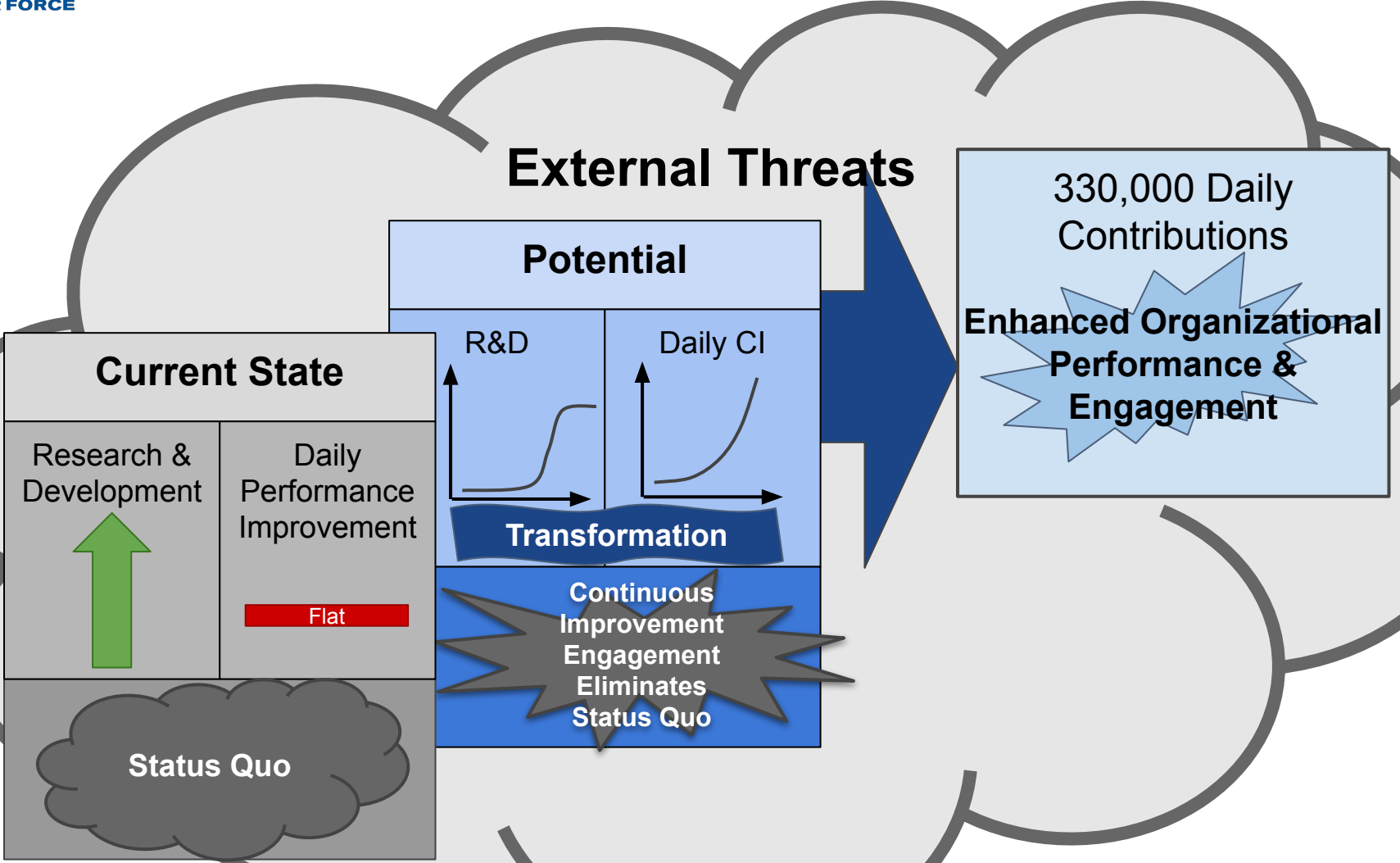
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# Why Are We Discussing Change?



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# Expected Outcomes

- Familiarize you with our thinking about AF CPI<sup>2</sup>
- Align you to how we will work together
- Connect with you to start to accomplish a joint product using Career Field Management as a gateway to creating a CPI<sup>2</sup> culture within the AF and in every Airman





# Agenda for the Webinar



- Vision
- Why a *SYSTEM* of CPI<sup>2</sup>
- The Challenges we See
- Our Experience
- Our CPI<sup>2</sup> Model
  - The Thinking System
- The Learning EcoSystem
- The Simulation
- CPI<sup>2</sup> Development Approach



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# Vision of CPI<sup>2</sup>



- CPI<sup>2</sup> is a *Thinking System* concept
- CPI<sup>2</sup> is Mutual Trust and Respect
- CPI<sup>2</sup> is vital to the interests of the Air Force
- CPI<sup>2</sup> is part of the everyday job
- CPI<sup>2</sup> is logical and rational approach
- CPI<sup>2</sup> is growth with individual career progression
- CPI<sup>2</sup> is a part of Career Field Management



# Why a System of CPI<sup>2</sup>

- Systems are designed to accomplish a single purpose
- Systems require coordinated resources
- Systems require coordinated effort
- Systems have common processes, methods, and tools
- Systems make it easier to see waste & sub-optimization
- Systems create predictability



***We intend to eliminate isolated efficiency***



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# The Challenges we See



- Mission and readiness are complex
- Changing nature of the operational environment
- Work is being driven by technology
- Creating a CPI<sup>2</sup> support environment
- Understanding people and change
- Working with less without decreasing commitment
- Creating a system of work that fits current day reality

*We are constantly challenged to do more with less*



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# Our Experience:

## Toyota's Definition of a Great Place to Work

- More people less machines
- Standardize the "best way"
- Intrinsic motivation
- Each line is capable of infinite improvement
- ***Small change matters***
- Improvement each day
- ***No-blame culture***
- Results build attitude
- It's about growing people
- Accountability builds people
- ***Standards expose problems***
- Employees are heard
- Processes with fewer surprises
- Training is strategic
- Mutual ***trust and respect***

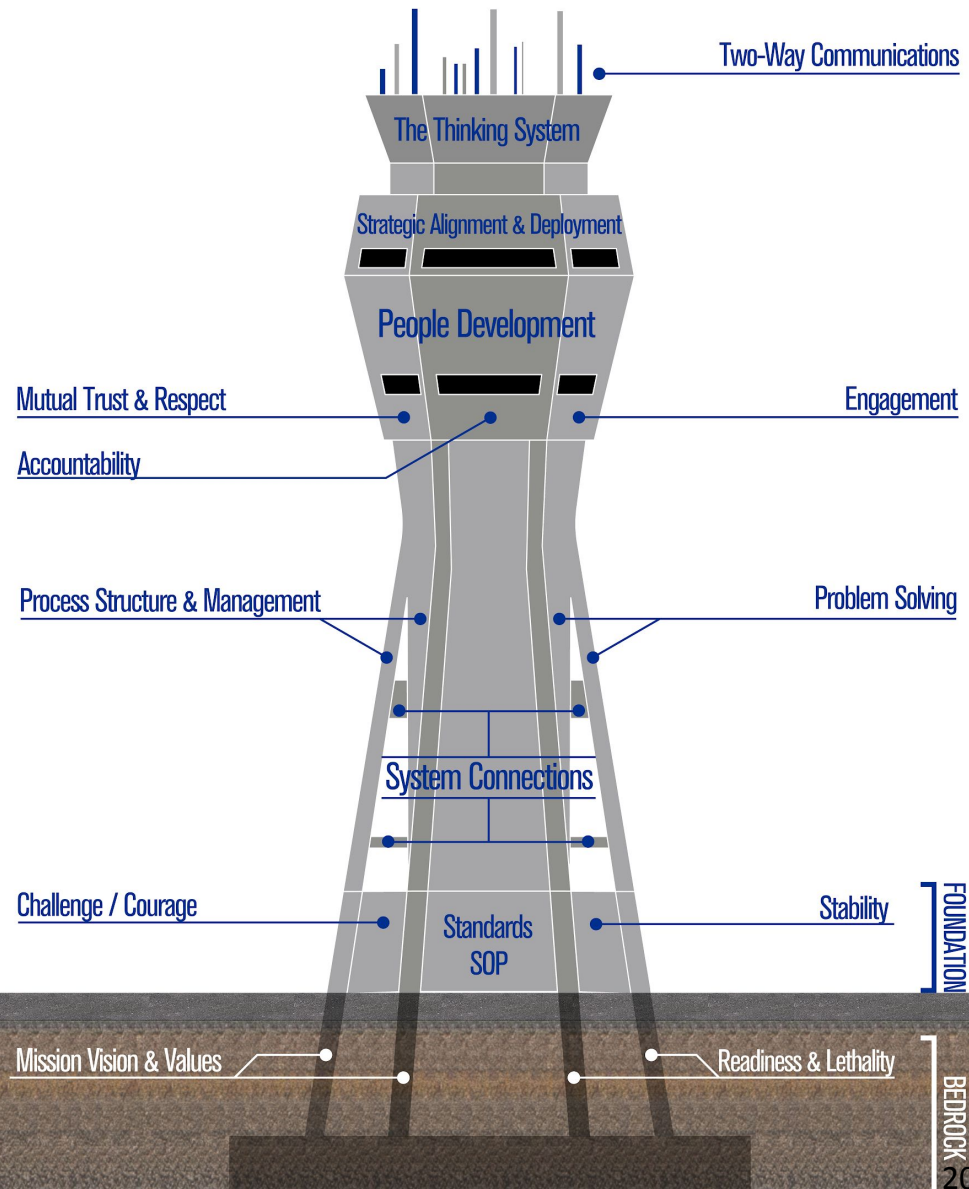
# CPI<sup>2</sup> Culture Construction

## Learning Steps

1. Bedrock & Foundation
2. The Thinking System
3. SA&D
4. Problem Solving
5. Process Structure & Management
6. People Development
7. System Connections

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# Culture of CI Tower



FOUNDATION

BEDROCK  
20



# The Learning EcoSystem:

## Emphasis on Place for Learning





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# The Learning EcoSystem



- Webinar
  - Air Force Continuous Improvement and Innovation (CPI<sup>2</sup>)
- Pre-Courses
  - Bedrock and Foundation
  - The Thinking System
  - Problem Solving and Process Structure & Management
  - People Development and System Connections



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# The Learning EcoSystem



- Simulation
  - Reflection
  - Problem solving
  - Teamwork
  - System to support CPI<sup>2</sup>
  - Visual systems to see problems, deviations, and opportunities
- Accountability to understand the value of meeting and improving standards
- Evaluation to understand how we are doing



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# The Simulation: Setting



- A complex process - analysis of the development and manpower planning process for a plant
- The reallocation of personnel to a new facility
- A strategic emphasis to staff a new facility and also achieve productivity goals
- Meeting productivity challenge during a reallocation
- Two key roles: General Manager of the Company, Plant Manager of current plant
- Very interactive with teamwork and breakouts for dialog and discussion
- Immediate Reflection and discussion





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# The Simulation:

## Opportunities for Thinking & Learning

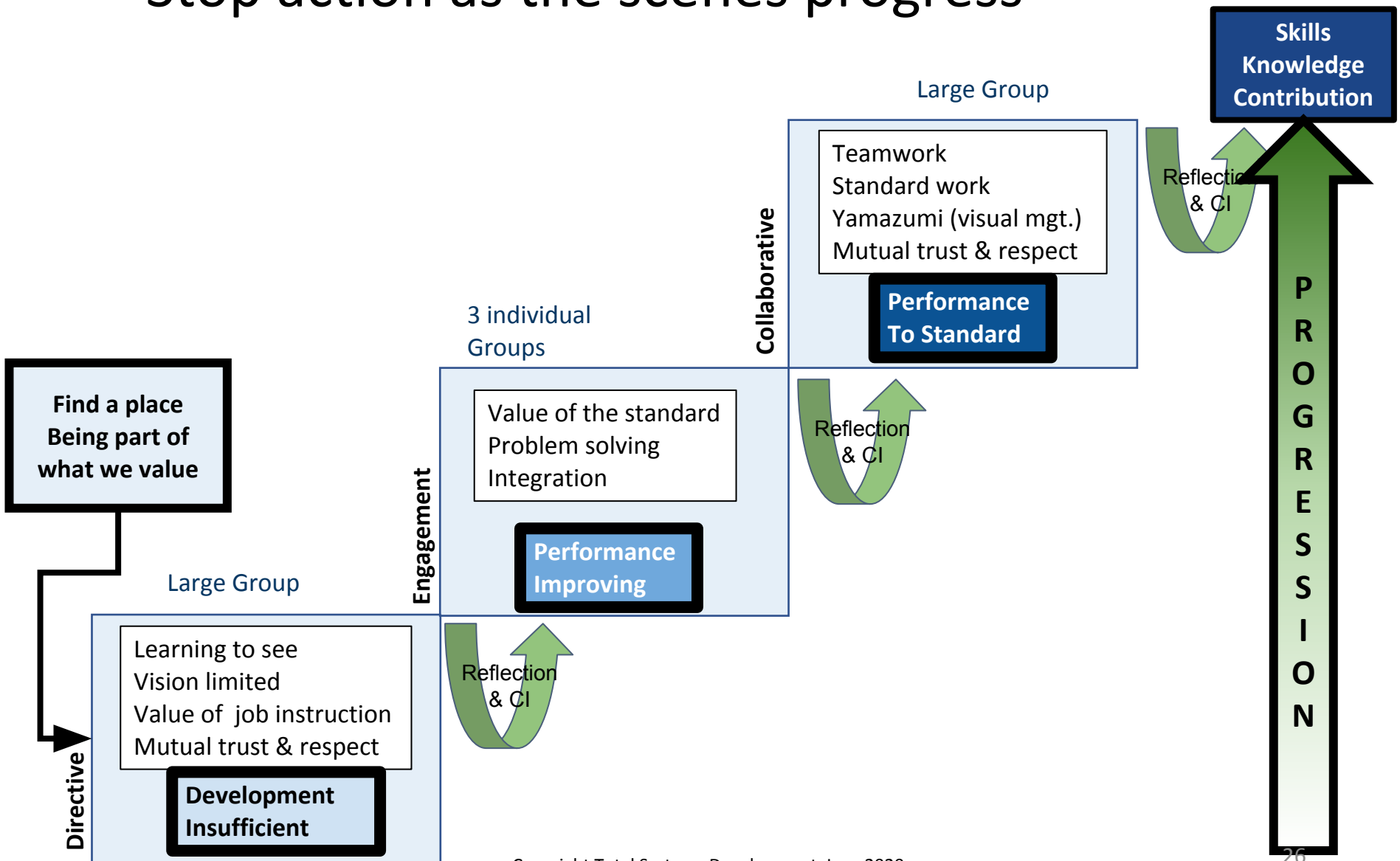
- Analysis of the current situation as a part of thinking, planning and learning systematically
- Planning from critical thinking, plans as commitments
- Model for the role of a leader
- Reflection, analysis and Evaluation at each step of the annual plan cycle
- Creation of a plan for achieving goals with systematic management
- Techniques for alignment of goals and for monitoring the processes
- Begin to see how CPI<sup>2</sup> applies within your career field



# The CPI<sup>2</sup> Development Approach



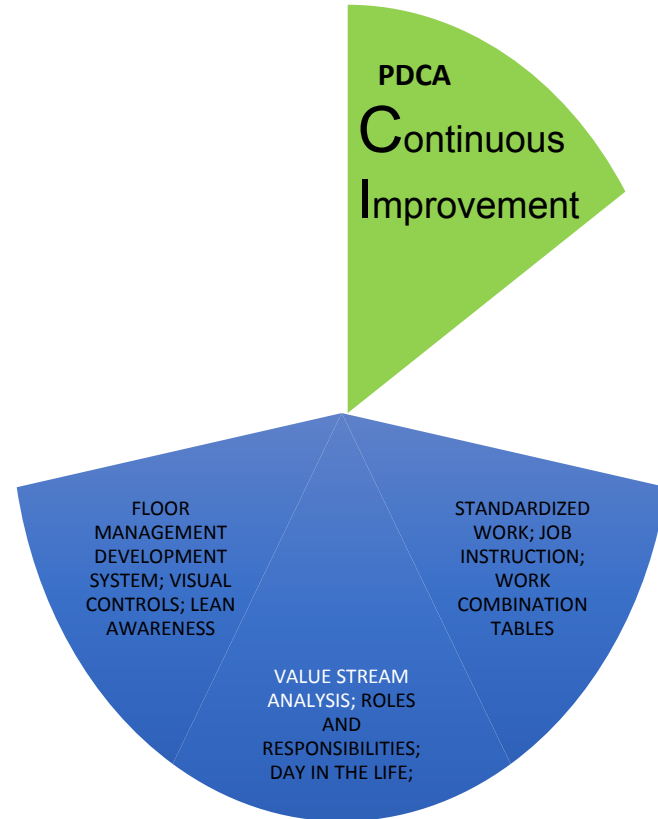
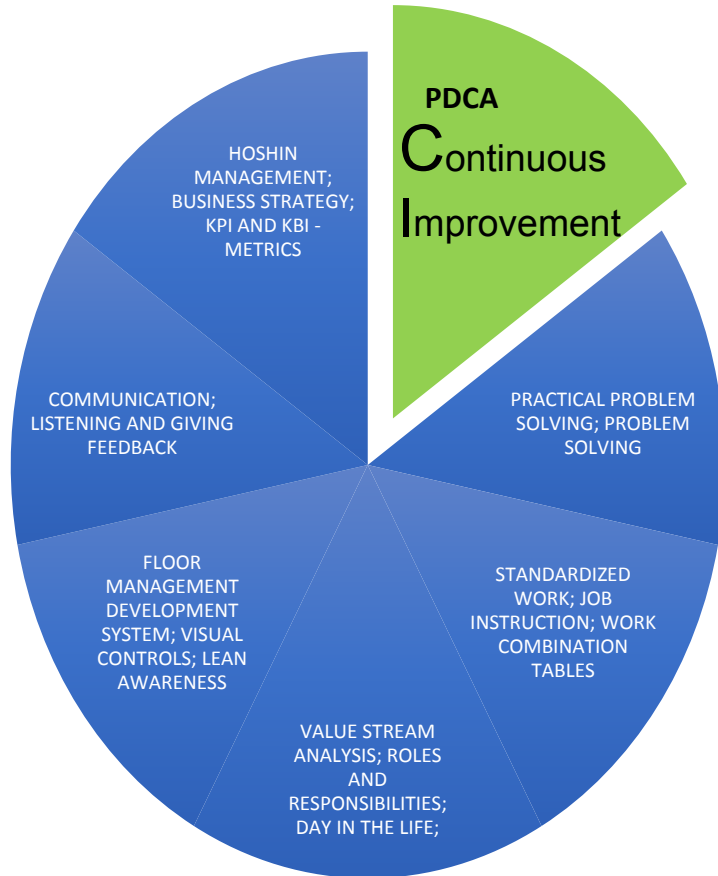
## Stop action as the scenes progress



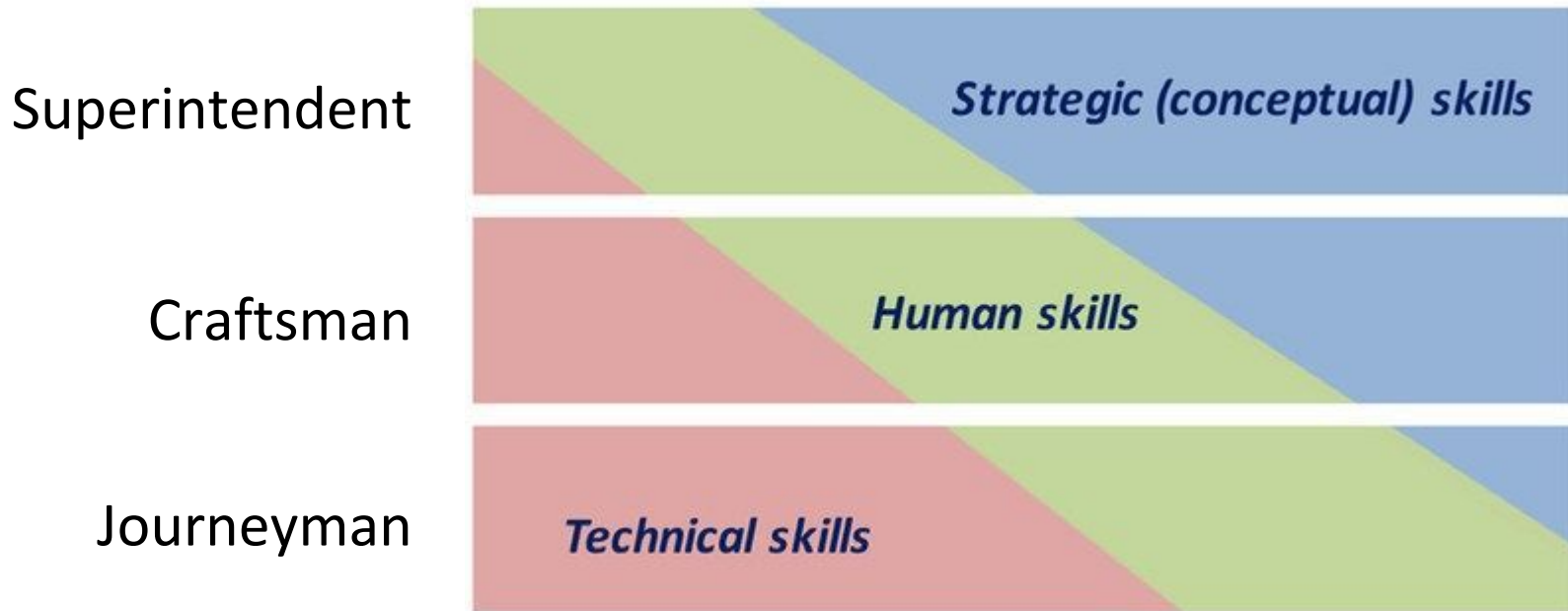


## Methods Through Training

## Methods Through Training



# Training Emphasis by Category





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# Competency Families



Master Craftsman	Kaizen Execution and Sustainment	Organizational Development	Planning Execution	Strategic Thinking
Craftsman	CAPDCA	Interpersonal Skills	Sustainment	Kaizen Improvement
Journeyman	Plan, Do Check, Action	Influence Coaching Cooperation	Standard Work	Daily Schedule Attainment
Apprentice	Problem Identification & Initiative	Communication & Teamwork	Consciousness	Ownership & Commitment
	<b>Problem Solving</b>	<b>Emotional Intelligence</b>	<b>Commitment to Excellence</b>	<b>Strategic Thinking</b>

## Fundamentals of The Thinking System

**People Development & Continuous Improvement**



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# Your Questions?





# Our Questions to You



- What would you like us to know
- How can we together integrate CPI<sup>2</sup>
- What are the limiting factors to CPI<sup>2</sup> implementation

**\*\* Respond to us by Friday at [Plillard@leancpi.com](mailto:Plillard@leancpi.com) or [Jallen@leancpi.com](mailto:Jallen@leancpi.com)**

**\*\*\* Also give us a time when you can be reached to discuss the overall answers to our questions. (Give us a week to assemble your responses to our questions)**