

# STREAM ANALYSIS

Diagnosing  
Organizational Change

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HPRCT 2010

# Changes to INPO Assistance

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- INPO has received feedback that assistance often feels like an evaluation
- New objectives and behaviors of assistance:
  - Be a part of the station team
  - Be more facilitative/consultative
  - Provide solutions, not just identify gaps
- Information gained during an assistance activity cannot be used during a subsequent evaluation activity. It can be reviewed by the evaluator as part of their preparation. (This is not a change)

# What is Stream Analysis?

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- A facilitated method to understand organizational issues and help prioritize and develop integrated responses to those issues (Jerry Porras, Stanford University)
- A systematic and systemic approach for identifying and separating core problems from symptoms
- An approach to identify organizational drivers for NRC cross-cutting issues in HU and CAP

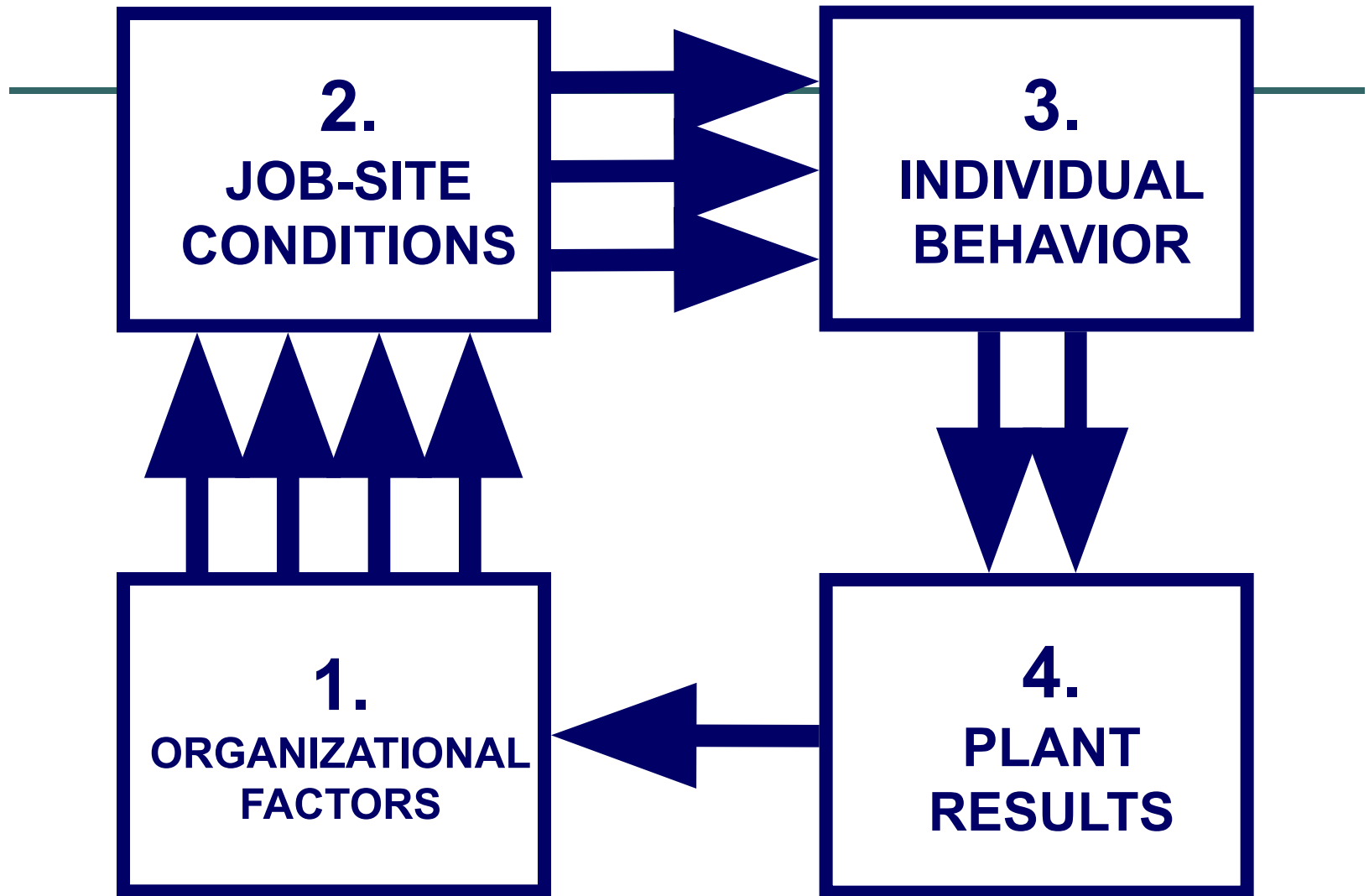


## **Why Stream Analysis?**

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- See relationships between issues formerly viewed as single, isolated problems
- Identify the most important issues – common causes that drive multiple issues
- Determine unseen relationships and causes
- Promote a team approach to improving performance
- Other; change management and root cause investigations/common cause analysis

# INPO Performance Model



# Overview of Stream Analysis Process

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- Day 1:
  - Describe the purpose and process of stream analysis
  - Stream the most recent evaluation AFIs
  - Determine the 'causal' relationships between the AFIs
- Day 2:
  - Analyze individually
  - As a group, discuss hidden drivers and corrective actions

# Process Overview – How's It Done?

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- Pre-work
  - Identify problem statements to be used
    - AFIs? PDs? Cause Statements? Outage Issues?
    - 15-16 issues typically take a full day
  - Determine participants
    - Typically top 20-25 of leadership team
  - Load software
    - INPO license agreement
  - Make meeting arrangements
  - Create and send Base Document and instructions

# Process Overview – How's It Done?

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- Train the participants – deliver presentation
- Stream the problem statements
  - Problem statement owner provides a brief summary of the issue and their stream recommendation
  - Group discussion on stream recommendation
    - (15-20 min each)
  - Take vote on stream – Outcome desired is consensus
    - If consensus is not reached, ask decision maker for stream placement
- Repeat the steps above until all problem statements are streamed
  - Often split, consensus vs. disagreement



# Rules for Reaching Consensus

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- We will discuss issues then take a 'vote' to see how participants are leaning
- Everyone must vote
- Additional discussion and votes if necessary
- If consensus is not reached, 'Can you support this stream with no significant reservation?' to the individuals of the minority streams
- If any member cannot support the final stream decision, the decision maker determines the placement
- Consensus / No-consensus threshold

## **Additional Thoughts**

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- The discussion is what is most important, but there is limited time so make good use of it
- If anyone feels strongly about a certain stream for an AFI recommend they take note of that
- Stream from left to right

# AFI Streams

<u>Right Picture</u>	<u>Processes</u>	<u>Job Performance</u>	<u>Ownership</u>
<ul style="list-style-type: none"><li>•Mission</li><li>•Organizational Structure</li><li>•Clear Direction</li></ul>	<ul style="list-style-type: none"><li>•Work Management</li><li>•Administrative Controls</li><li>•Hazard Control</li><li>•Engineering</li><li>•Human Resources</li></ul>	<ul style="list-style-type: none"><li>•Knowledge &amp; Skills</li><li>•Capacity and Readiness</li></ul>	<ul style="list-style-type: none"><li>•Cultural Factors</li><li>•Open Communication</li><li>•Teamwork</li><li>•Coaching</li><li>•Values</li></ul>

# Definition: Clear Picture

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- Key Question:
  - Did the station or individual have a clear picture of WHAT should be done? (surprised, unclear)
- May be deficient in areas such as:
  - Vision or Mission
  - Planning
  - Priorities
  - Role clarity
  - Communication
- Standards and expectations

# Definition: Processes

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- Key Question:
  - Did the station or individual understand HOW work should be done?
- May be deficient in areas such as:
  - Work flow design
  - Documentation
  - Procedure development
- Design bases and margins

# Definition: Job Performance

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- Key Question:
  - Did the station or individual have the KNOWLEDGE, SKILLS, or ABILITY to do what should be done?
- May be deficient in areas such as:
  - Fundamentals knowledge
  - Technical qualifications
  - Training
- Skill of the craft

# Definition: Ownership

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- Key Questions:
  - Was the station or individual MOTIVATED to perform the work correctly? Do we just accept this?
- May be deficient in areas such as:
  - Engagement
  - Accountability
  - Reinforcing standards
  - Coaching and mentoring
  - Teamwork

# Streams

<u>Right Picture</u>	<u>Processes</u>	<u>Job Performance</u>	<u>Ownership</u>
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# Diagnosis Chart

Right Picture

Processes

Job  
Performance

Ownership

AFI #1

AFI #2

AFI #3

AFI #4

AFI #1

AFI #5

AFI #6

AFI #7

AFI #8

AFI #1

AFI #1

AFI #1

# Diagnosis Chart

Right Picture

Processes

Job  
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AFI #1

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AFI #1

AFI #5

AFI #8

AFI #3

AFI #7

# ROOT CAUSE STREAMS

<b><u>JOBS / PEOPLE</u></b>	<b><u>PICTURE</u></b>	<b><u>RIGHT PROCESS</u></b>	<b><u>OWNERSHIP / INVOLVEMENT</u></b>
<ul style="list-style-type: none"><li>•Selection</li><li>•Succession</li><li>•Training</li><li>•Knowledge &amp; Skills</li><li>•Motives</li><li>•Individual attitude</li></ul>	<ul style="list-style-type: none"><li>•Expectations</li><li>•Behavior</li><li>•Performance</li><li>•Vision, Goals, Strategy &amp; Plan</li><li>•Passion</li></ul>	<ul style="list-style-type: none"><li>•Procedures / Work Packages</li><li>•Work Management</li><li>•Way We Do Business</li><li>•Engineering Processes</li><li>•Work Flow Design</li></ul>	<ul style="list-style-type: none"><li>•Communication</li><li>•Oversight / Field Time</li><li>•Coaching Desired Behaviors</li><li>•Value Prevention</li><li>•Rewards System</li><li>•Engagement</li><li>•Teamwork</li></ul>

# Organizational Components of Stream Model

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## • Jobs/People

### JOBS / PEOPLE

- Selection
- Succession
- Training
- Knowledge & Skills
- Motives
- Individual attitude

- Individual based attribute
- Skill and knowledge based
- Process for selection solid
- Individual's attitude – not the cowboy
- Individual ability to interact with others

# Organizational Components of Stream Model

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- Picture

## PICTURE

- Expectations
- Behavior
- Performance
- Vision, Goals, Strategy & Plan
- Passion

- This is the formal side of the organization – “what makes it tick”
- Understanding what is excellence
- It’s the message on how individuals and the organization is to behave or perform
- It is the passion to succeed

# Organizational Components of Stream Model

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- Right Process

## **RIGHT PROCESS**

- Procedures / Work Packages
- Work Management
- Way We Do Business
- Engineering Processes
- Work Flow Design

- Formal rules that define “ways of doing things”
- Designed process or programs to get things done
- “What is acceptable” to the organization

# Organizational Components of Stream Model

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## **OWNERSHIP / INVOLVEMENT**

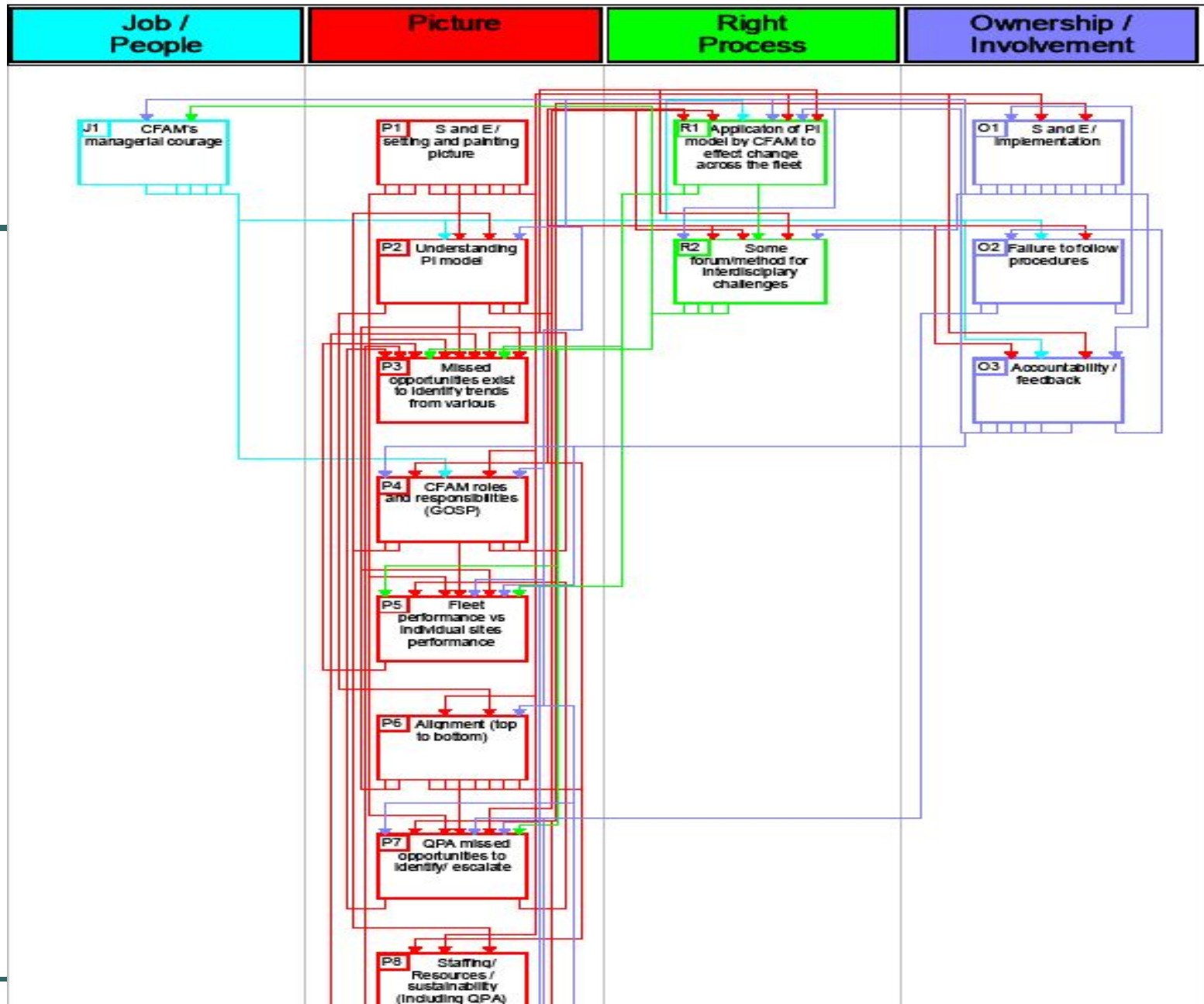
- Communication
- Oversight / Field Time
- Coaching Desired Behaviors
- Value Prevention
- Rewards System
- Engagement
- Teamwork

- Ownership / Involvement
  - By anyone in the organization
  - Coaching, mentoring, reinforcing at work locations
  - What is rewarded to “get it done!”
  - “Buy in” of the organization

# ROOT CAUSE STREAMS

<b><u>JOB</u> / <u>PEOPLE</u></b>	<b><u>PICTURE</u></b>	<b><u>RIGHT</u> <u>PROCESS</u></b>	<b><u>OWNERSHIP</u> / <u>INVOLVEMENT</u></b>
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# Process Overview – How's It Done?

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- Create Linkages
- Looking for a cause and effect relationship with a degree of significance
  - Review each combination of two problem statements
    - Problem 1 drives Problem 2
    - Problem 2 drives Problem 1
    - No relationship
- Time
  - Typically 45-60 minutes for all linkages

## Ground Rules

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- This should go quickly
- Listen for initial response
- Move on after one concurrence
- You can go back, but... does it make sense?

## Faciliator's role

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- Challenge group think
- Encourage different views
- Involve the “silent” team members
- Facilitate the discussion; not participate as stakeholder
- Operate the software
- Ground Rules

**Box Pair Arrows: DiagChart1** [X]

☒ Subsequent Boxes Only    ☐ All Boxes

**R1** Procedure  
process difficult  
to use

☐ ----->  
☐ <-----  
☒ None

**P1** Personnel  
safety challenges

Previous    Next    Done

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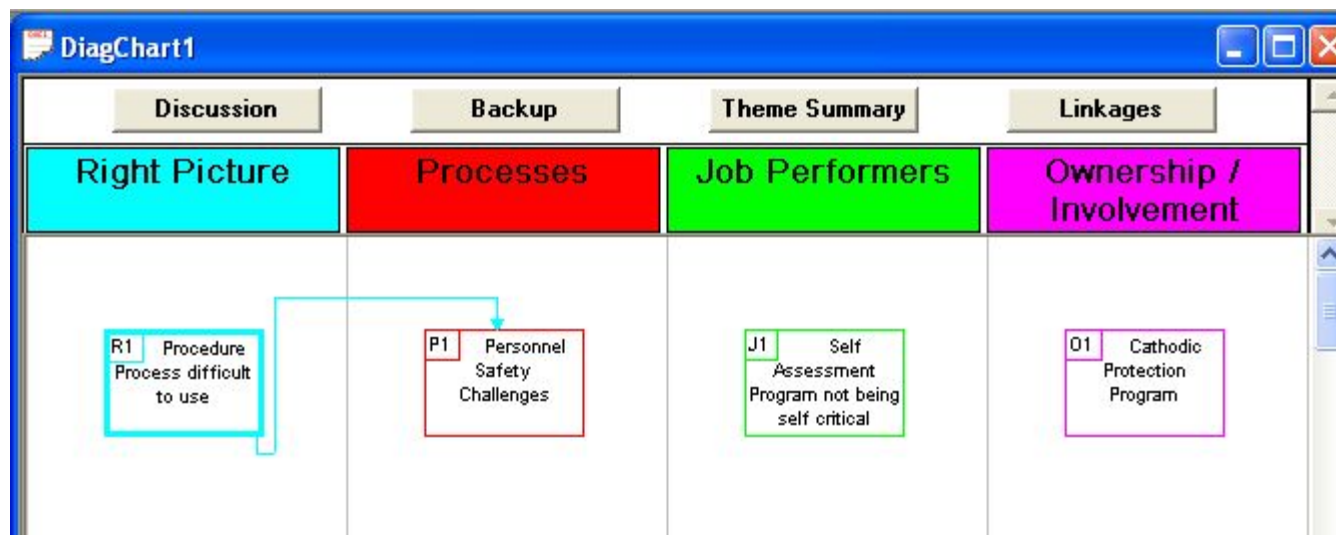
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R1 Procedure process difficult to use

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J1 Self Assessment program not being self critical

Previous      Next      Done

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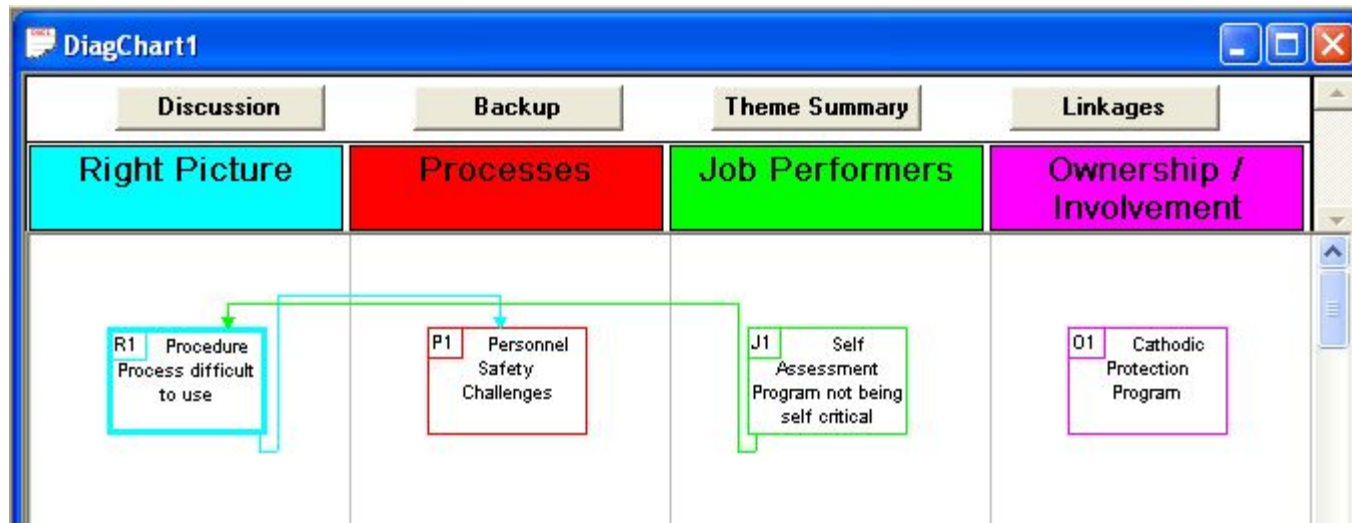
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Next
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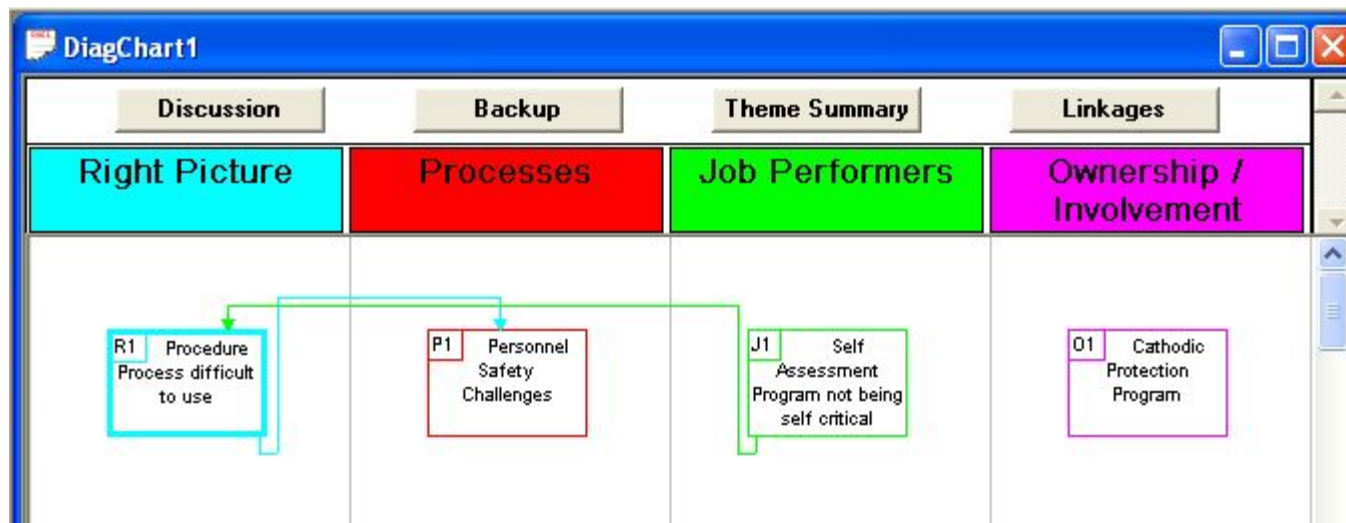
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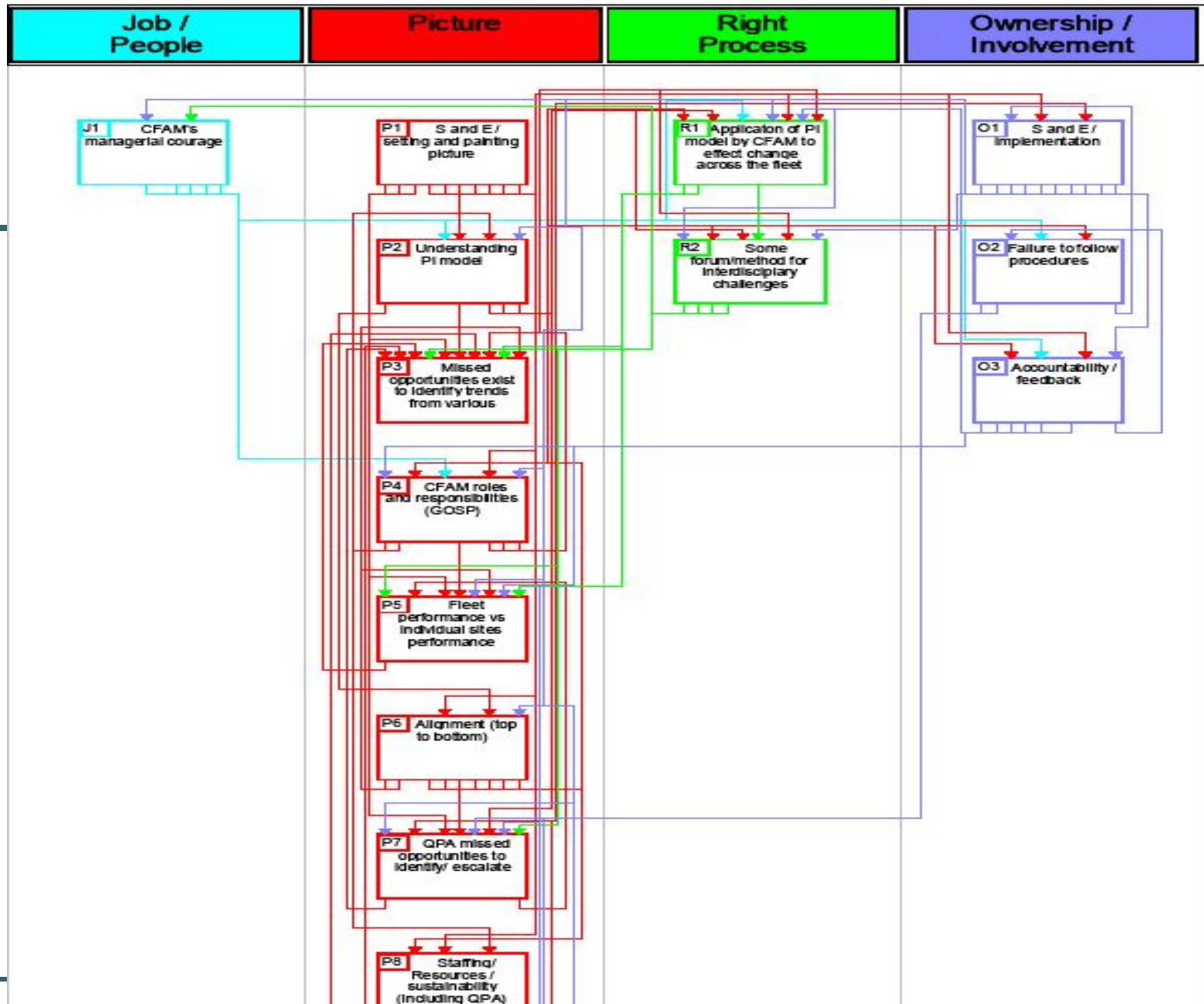
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☒ None

O1 Cathodic protection program

Previous
Next
Done







# Process Overview – Day 2

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- Homework – Analyze the Results
  - What key issues are driving the others
    - Typically 3-4 key drivers
  - The overall pattern of results and relationships
  - Those with only arrows out
  - Those with arrows in and out
  - Those with only arrows in
  - Those with no arrows

# **Process Overview – Day 2**

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- Discuss similarities, common causes, observations, and implications identified in homework
- Determine next steps

# Process Overview – How's It Done?

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- Clarify results and assess corrective actions
- Results determine significance level
- Drivers should receive a root cause
- Root cause results should be integrated into high-level site planning – e.g. business plan
- Review/validate current corrective actions to address drivers and identify additional actions
- Owners of key drivers corrective actions should help fix symptom problem statements.
- Recognize need for collaboration with development of corrective actions plans

# **Day 2 Management Team– How's It Done?**

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- Camp Fire

# Stream Analysis

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QUESTIONS?