

STREAM ANALYSIS

Diagnosing
Organizational Change

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HPRCT 2010

Changes to INPO Assistance

- 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?

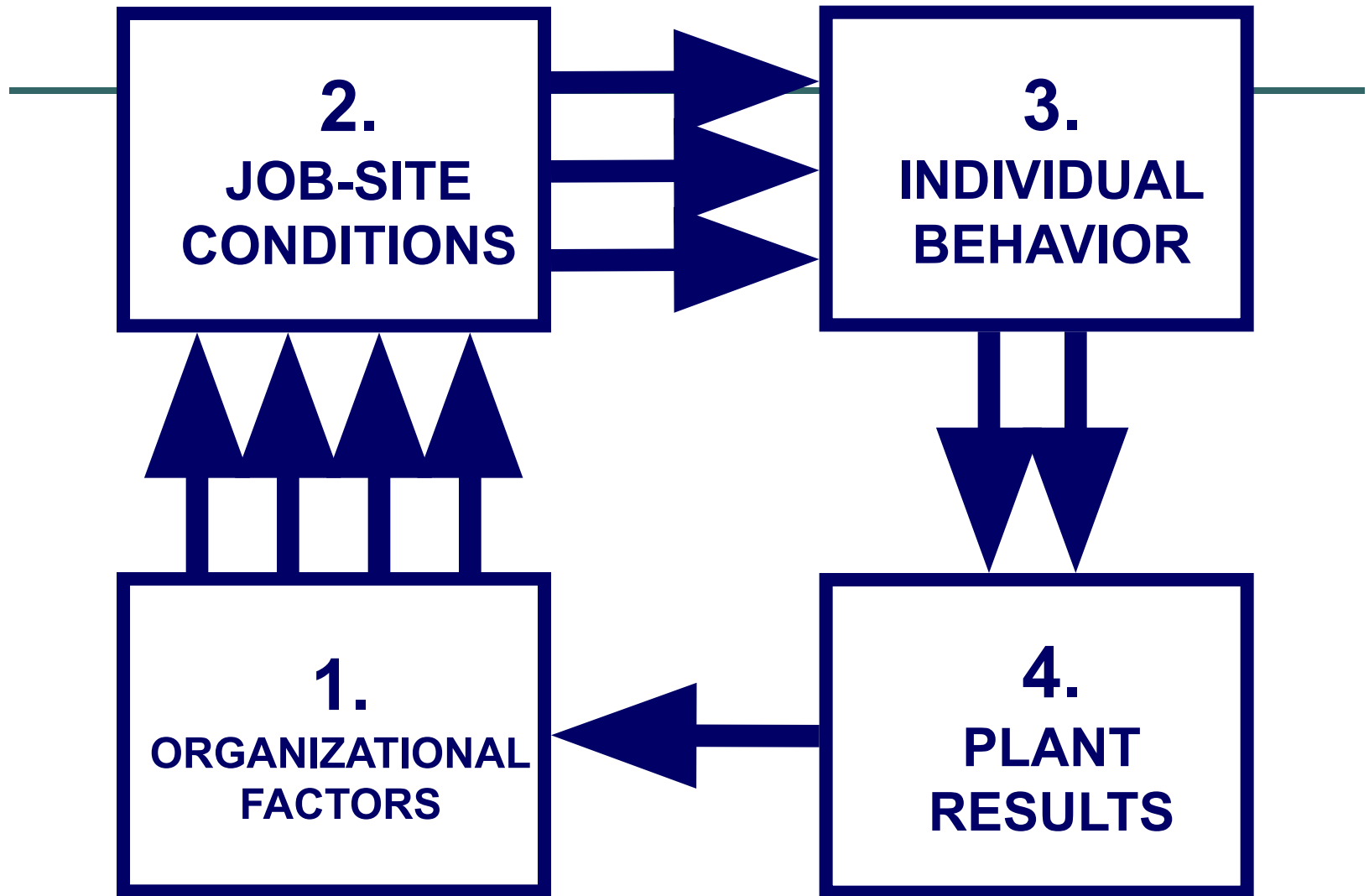
- A facilitated method to understand organizational issues and help prioritize and develop integrated responses to those issues (Jerry Porras, Stanford University)
- A systematic and systemic approach for identifying and separating core problems from symptoms
- An approach to identify organizational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



Why Stream Analysis?

- 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

- 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?

- 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?

- 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

- 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

- 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">•Mission•Organizational Structure•Clear Direction	<ul style="list-style-type: none">•Work Management•Administrative Controls•Hazard Control•Engineering•Human Resources	<ul style="list-style-type: none">•Knowledge & Skills•Capacity and Readiness	<ul style="list-style-type: none">•Cultural Factors•Open Communication•Teamwork•Coaching•Values

Definition: Clear Picture

- 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

- 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

- 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

- 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 #1

AFI #6

AFI #1

AFI #7

AFI #1

AFI #8

Diagnosis Chart

Right Picture

Processes

Job
Performance

Ownership

AFI #1

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AFI #6

AFI #1

AFI #5

AFI #8

AFI #3

AFI #7

ROOT CAUSE STREAMS

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

Organizational Components of Stream Model

• 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

- 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

- 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

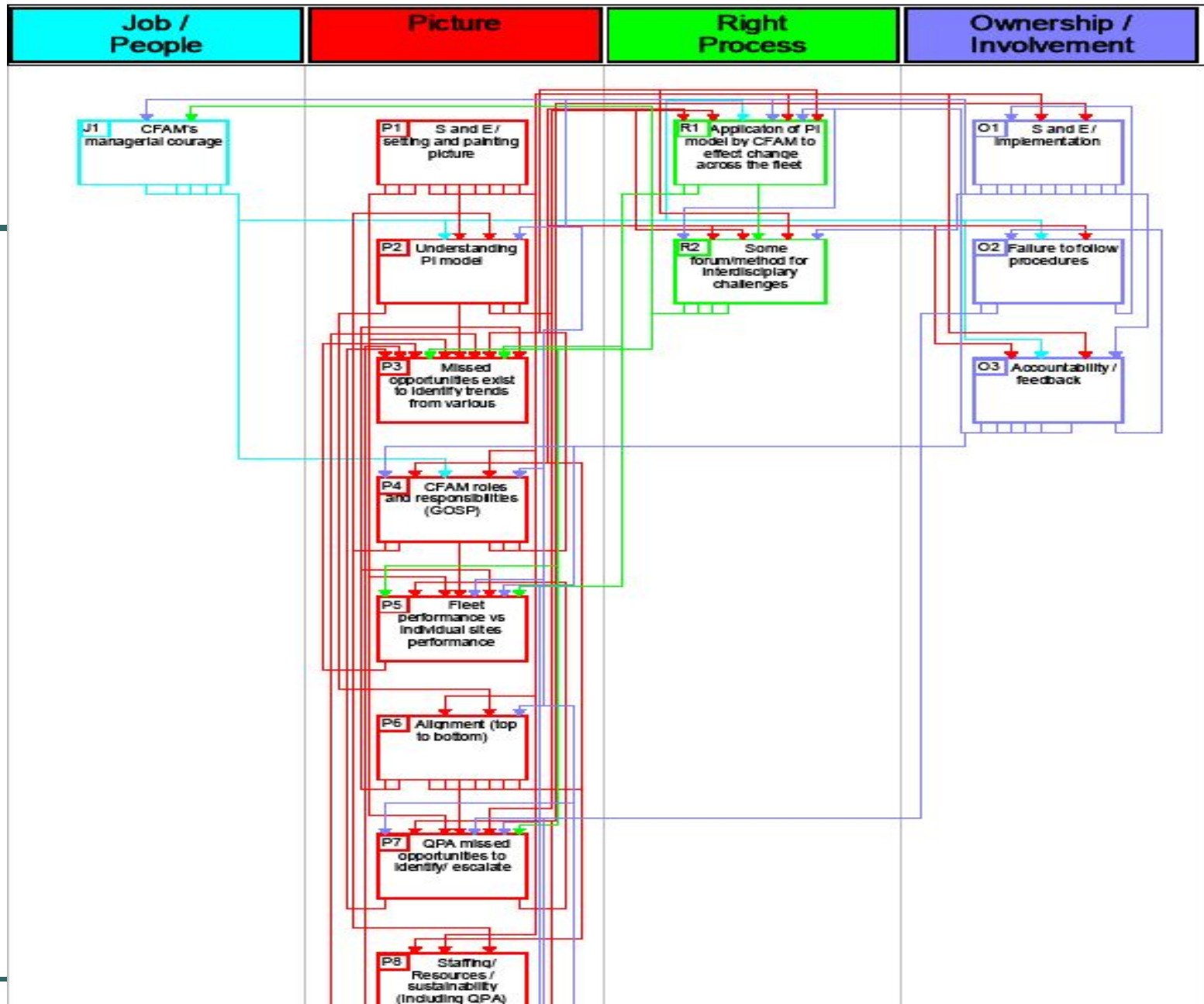
OWNERSHIP / INVOLVEMENT

- 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

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

- 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

- 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

- 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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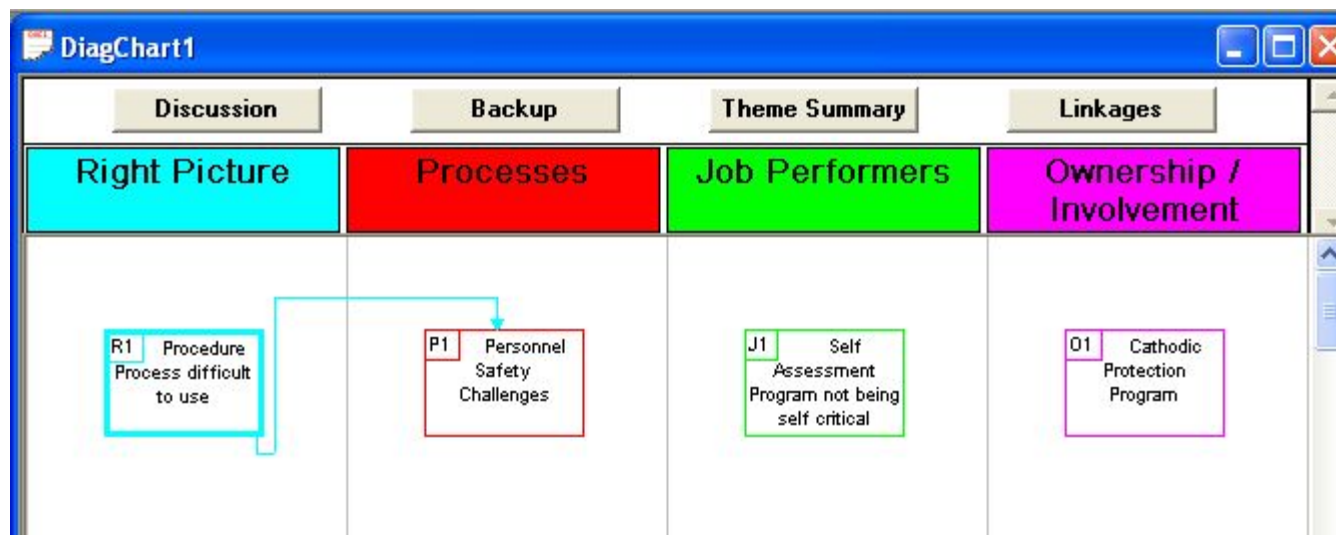
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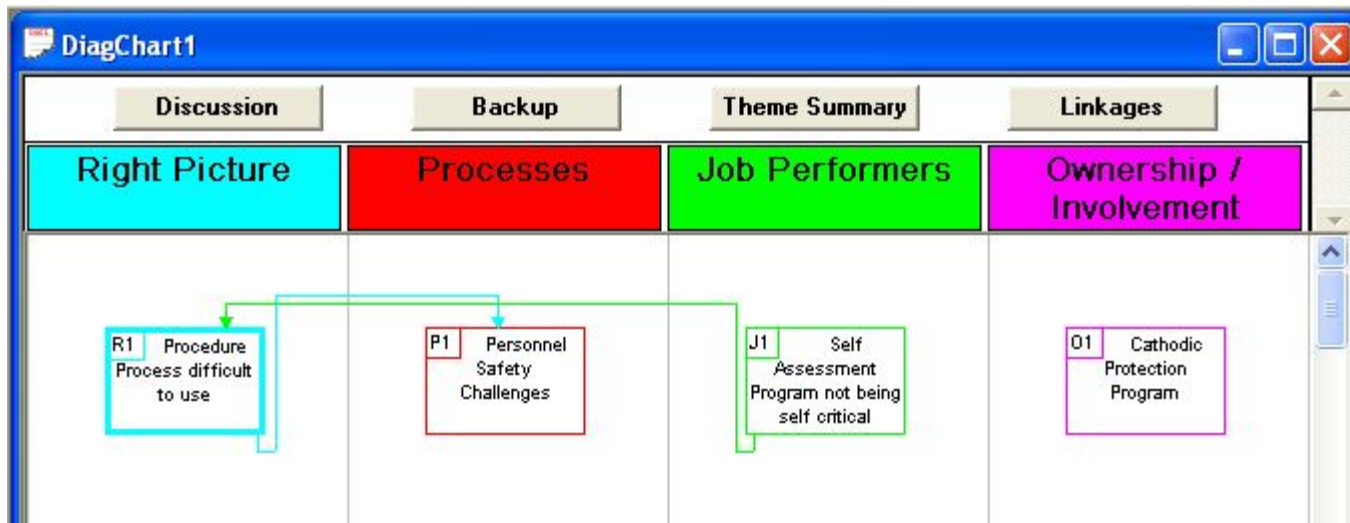
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Next
Done

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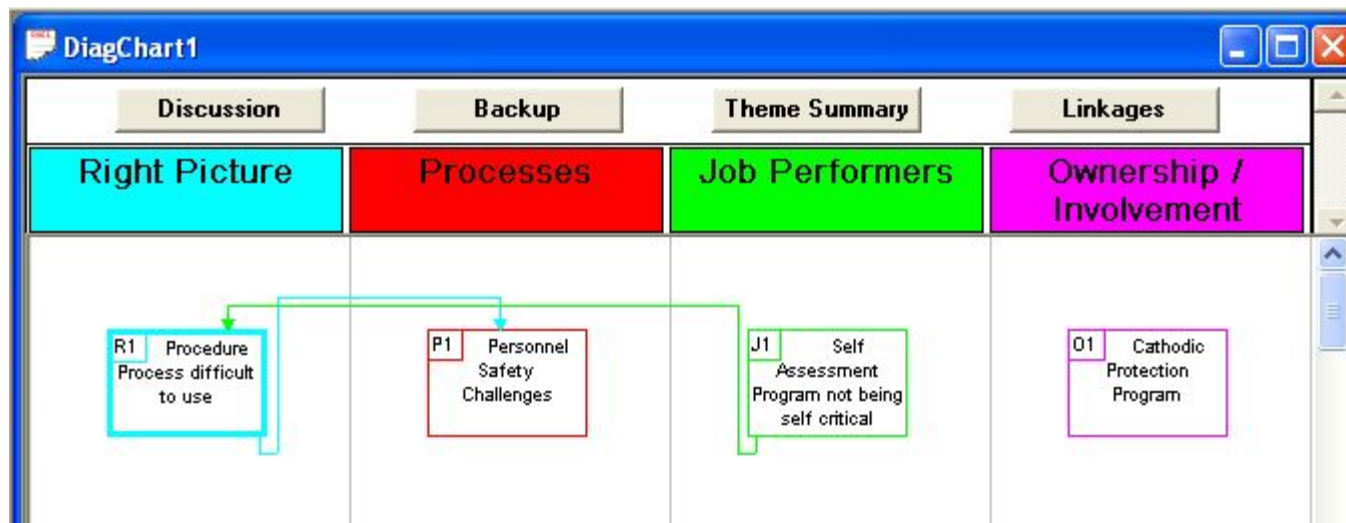
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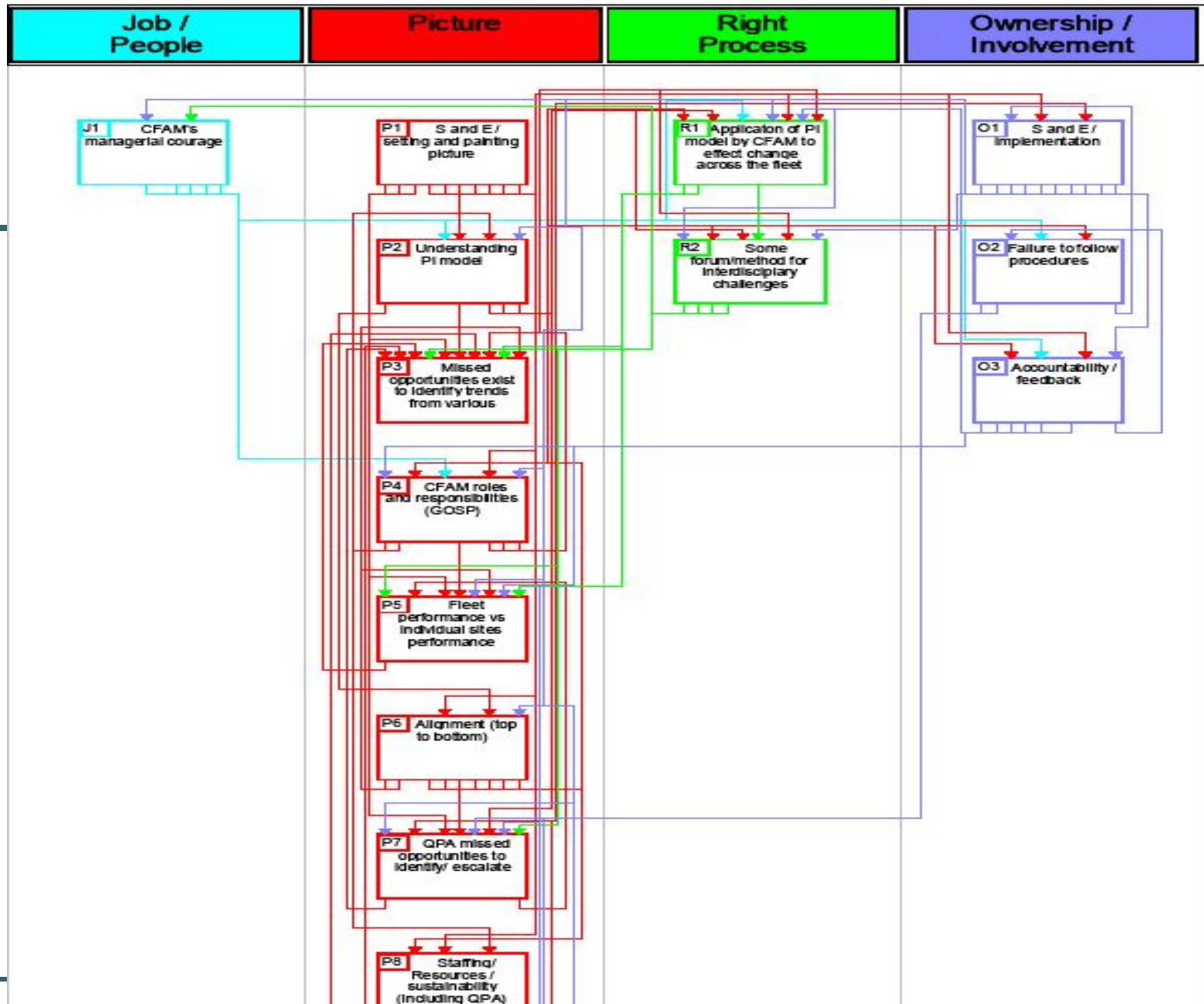
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☐ <-----
☒ None

O1 Cathodic protection program

Previous
Next
Done





Process Overview – Day 2

- 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

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

Process Overview – How's It Done?

- 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?

- Camp Fire

Stream Analysis

QUESTIONS?