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# Analyzing Performance Problems Using TapRoot

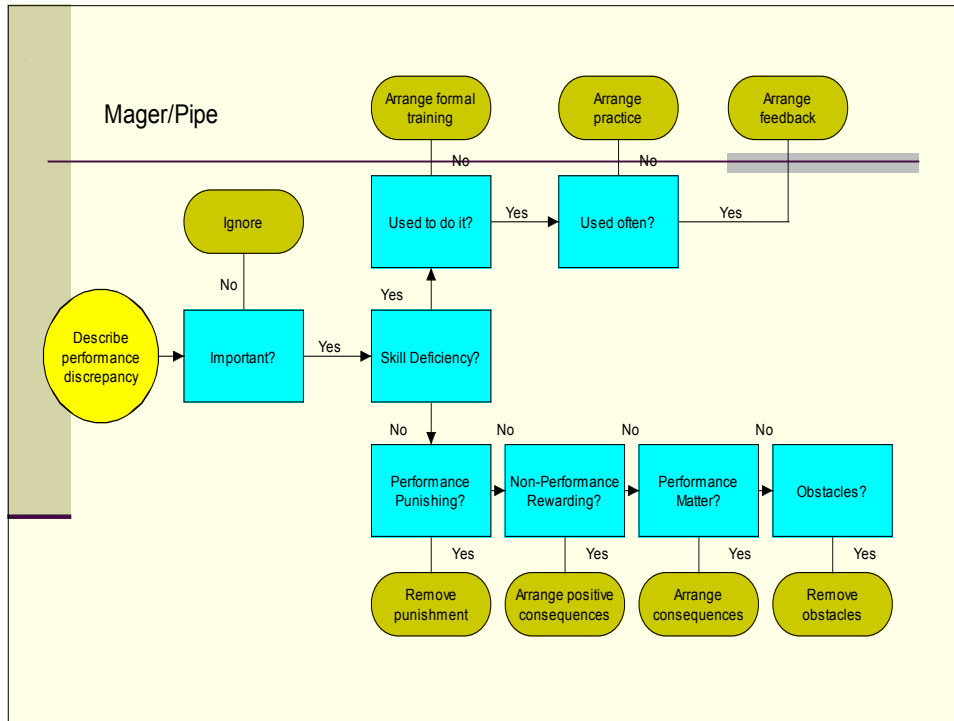
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# Analyzing Performance Problems “You Really Oughta Wanta”

By Robert Mager and Peter Pipe

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# Mager vs TapRoot

## Purpose of Analysis

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### Mager

- Directed towards supervisors and managers in supervising people
- Employee Work Discrepancy
- Changing Human Performance

### TapRooT

- Directed towards work problems, incidents or potential problems
- Reactive Analysis
- Pro-active Analysis
- Good Corrective Actions

## Where Both Agree

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If the analysis of the performance discrepancy or the analysis of the problem is incorrect the root cause and the solution/corrective action taken will most likely be ineffective.

## Path to Deficiency/Root Cause

### Mager

- Three Questions
  - Skill deficiency
  - Motivational deficiency
  - Other

### TapRooT

- Equipment Difficulty
- Performance Difficulty – Seven Categories
  - Procedures
  - Training
  - Quality Control
  - Communications
  - Management System
  - Human Engineering
  - Work Direction
- Many Root Causes

## Performance Discrepancy

### Mager

- Four Questions?
  - What is the performance discrepancy?
  - Is it a skill discrepancy?
  - Is it a motivational problem?
  - Is it neither?

### TapRooT

- Individual Performance?
  - Eight Questions?
- Team Performance?
  - Three Questions?
- Management System?
  - Four Questions?

## What is the Performance Discrepancy?

### Mager

- Describe the discrepancy – what is different between what is being done and what is supposed to be done?
- Is it important?

### TapRoot

- State the incident (circle)
- Investigate and draw snapchart
- Who did what wrong?
- What equipment failed?
- Identify causal factors

## Is it a skill deficiency?

### Mager

- Could he/she do it if their life depended on it?
- Could they do it in the past?
- Is the skill used often?
- Is there a simpler solution?
- Do they have what it takes?

### TapRoot

- Individual Performance
  - Were displays, alarms, controls, tools, or equipment identified or operated improperly?
  - Did the person need more skill/knowledge to perform the job or to respond to conditions or to understand system response?
  - Did failure to agree about the who/what/when/where of performing the job play a role in this problem?
  - Questions 1,2,8 answer the question “do they have what it takes.”

## Is it a motivational problem?

### Mager

- Is desired performance punishing?
- Is non-performance rewarding?
- Does performance really matter?
- Does he/she receive feedback on performance?

### TapRoO

- Individual Performance
  - Should the person have had and used a written procedure but did not?
- Management System
  - Was a task performed in a hurry or a shortcut used?
  - Had management been warned of this problem or had it happened before?
  - Were policies, admin. controls, or procedures not used, missing, or in need of improvement?

## Is it neither?

### Mager

- Are there obstacles to performing?
  - Authority?
  - Proper tools/equipment?
  - Environment problems?
  - Demand on time, stress, fatigue etc.

### TapRoO

- Individual Performance
  - Was a person excessively fatigued, impaired, upset, bored, distracted, or overwhelmed?
  - Was a mistake made while using a procedure?
  - Were alarms of displays to recognize or to respond to a condition unavailable or misunderstood?
  - Were displays, alarms, controls, tool, or equipment identified or operated improperly?
  - Was work performed in an adverse environment?
  - Did work involve repetitive motion, uncomfortable positions, vibration, or heavy lifting?

## Other Questions?

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### Mager

- Detailed questions lacking
  - What was wrong with training?
  - What is missing in training?
  - What is the motivation causing the problem?

### TapRoot

- Seven Root Cause Categories of questions
- Twenty one Near Root Cause questions
- Many Root Cause questions

## Summary

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- Mager
  - Mainly looking at problems that are either training or motivational
  - General questions
  - Quick analysis
- TapRoot
  - Looking at problems that are equipment based, performance based
  - Detailed questions
  - Identified many root causes
  - Analysis in depth