Using Problem Analysis to Find the Cause of a Human Performance Problem

Purpose

To find the cause of, and correct, a human performance problem using a logical and systematic approach.

Introduction

Frequently, people let emotions enter into descriptions of human behavior when what is required are specific, concrete descriptions to begin resolving human performance problems. How often are words like "unmotivated," "hostile," "aggressive," and "lazy" used in reference to human performance? Pinpointing the problematic behavior provides an answer to the question, "What exactly do you see or hear?" For example: "Brian frowns when he deals with clients on the phone and does not answer detailed questions." This reports actions that can be seen and heard and is the starting point for resolving concerns with Brian's performance.

Technique

The power of Problem Analysis to solve performance difficulties rests with gathering accurate information. Often performance difficulties are reported to us rather than observed directly. Instead of taking opinion or anecdotes at face value, question carefully to determine the facts, modifying the specification questions to draw out information on observed behavior. By focusing on observed behavior, assumptions can be discarded and chances of identifying true cause increased. (The specification questions for performance concerns are included.)

Use the Performance System model to give you insight into possible causes.

Describing Human Performance Problems

State the problem:

- What is the performance problem with unknown cause? Or, what is the observed behavior for which you need to find cause?

- Whose performance or behavior are you concerned about?

- What is this performance or behavior?

Specify the problem:

IS	IS NOT
WHO	
Who, specifically, is the person (or group) about whose behavior you are concerned?	Who else (person or group) could you expect to exhibit the same behavior, but do not?
WHAT	
What, specifically, is the observed behavior?	What other similar behavior could you expect to observe, but do not?
WHERE	
Where is this behavior observed (geographically)?	Where else could you expect to observe this behavior, but do not?
WHEN	
When was this behavior observed first?	When could the behavior have been observed first, but was not?
When since that time has the behavior been observed? Any pattern?	When else since that time could you have observed this behavior, but did not?
When does this behavior occur on the job?	When else could it occur, but does not?
EXTENT	
How many people (or groups) exhibit this specific behavior?	How many people could exhibit this behavior, but are not?
How much does the behavior deviate from the desired behavior?	How much could the behavior deviate from the desired behavior, but does not?
How many instances have there been?	How many instances could there be, but are not?
What is the trend? (…in the performer?) (…in the behavior?) (…in the number of instances?)	What could be the trend, but is not? (…in the performer?) (…in the behavior?) (…in the number of instances?)

Looking for the Possible Causes in the Performance System

Once the performance problem has been clearly defined, look for distinctions to help develop possible causes. Rather than focusing only on the individual, look at differences in the Performance System between the IS and IS NOT.

The Performance System model has evolved through years of behavioral science research. It has been validated as a model that helps explain why people perform the way they do. Its adaptation to work settings and systems is a natural extension, enabling organizations to improve their effectiveness.

The Performance System consists of five components. All components must be sound for the Performance System to be effective. The components are:

Situation—the immediate environment or setting in which the Performer works.

Performer—the individual or group expected to perform.

Response—the behaviors or actions of the Performer.

Consequences—the events that follow the Response and increase or decrease the probability that the behavior will occur again, given the same Situation.

Feedback—the performance-based information Performers receive about progress toward a goal that guides them in maintaining or modifying behavior.
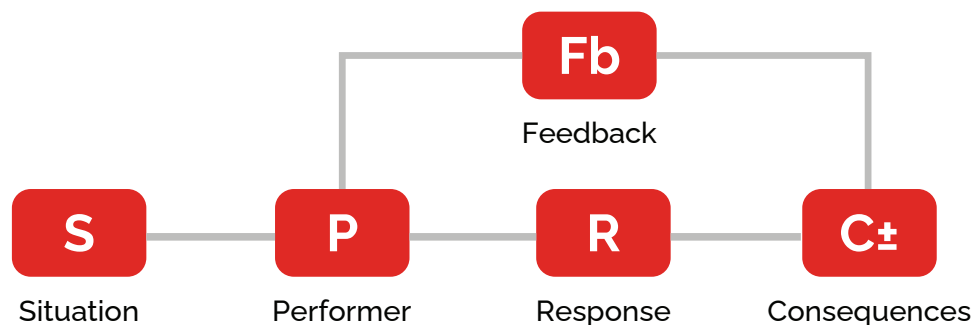
In a particular Situation, a person or group (Performer) is called on to take an action (Response) which produces results (Consequences). Information (Feedback) is provided to the Performer about the adequacy and appropriateness of the result. Differences between people with and without performance problems can usually be found in these areas. Compare your IS and IS NOT Performers and look for differences in the Performance Systems. These differences may suggest several causes.

Special care is needed to confirm cause. Also, removal of every deficiency in the Performance System may not be necessary to bring performance up to Should. Discussions and collaboration between the leader and Performer around specific elements of the Performance System is usually the best way to correct a performance problem.

Although the definitions and relationships may seem clear, a detailed description of the components and how they are related will provide further insight.

Situation

Situation refers to the immediate environment or setting in which the Performer works, and that provides the "occasion to perform." It includes three key elements:

Performance expectations—specific results, measures, and standards desired of the Performer in completing the work.

Signal to perform—a cue or indicator to the Performer that action needs to be taken.

Work environment—how the work is planned, the steps involved, and how each step is completed; what resources are available to help complete the work; and the nature of the physical surroundings.

The Situation is critical to effective performance. If the Performer does not know or understand what is expected, he or she is unlikely to perform as required. Sometimes cues or signals to perform are so difficult to detect or interpret that a Performer is unable to recognize when a Response is required. A person may be called upon to perform two incompatible tasks, making it impossible to do either satisfactorily. Or the job procedures or limited resources make good performance difficult.

To increase the probability of the Performer performing as expected, assess and consider adjusting each aspect of the Situation.

Performance Expectations

Two types of questions are used to analyze this and other Performance System components. The first are general, open questions that guide the analysis and maximize the information gathered. These general questions are usually asked first in the analysis.

The second are specific, binary or closed questions that focus the analysis. These questions help pinpoint the Performance System deficiencies and can be used to confirm information gathered through the general, open questions.

The general question for assessing performance expectations is:

How clear are the performance expectations and how well are they understood?

A more detailed analysis can be completed by gathering information to answer three binary questions. These questions pinpoint the Performance System deficiencies related to performance expectations:

Have performance expectations, including measures, been established for the desired Response?

Have performance expectations been clarified with the Performer?

Does the Performer agree that these expectations are attainable?

If performance expectations have been established and communicated but have not been agreed upon by or clarified with the Performers, they might feel that the expectations are incompatible with other aspects of their job and therefore unattainable.

There should be no confusion regarding performance requirements. In order for expectations to be clear, the Performer not only needs to know what is to be done, but which aspects of performance are most important to the organization.

The measures and standards of performance should clarify the organization's desire for quality, quantity, cost, or timeliness—or any combination of these. Measures define

the dimension or aspect of performance that is critical, while standards set the specific level of performance (stated in terms of the measure).

Signal

The general question for assessing the signal is:

- How clear is the signal to perform?

A binary question can be used to understand the nature of the signal, its visibility, and clarity:

- Can the Performer easily recognize the signal to perform?

Signals are most effective when they are built into the job and do not require judgment on the part of the Performer.

Work Environment

The general question for assessing the work environment is:

- How well does the work environment support expected performance?

Additional binary questions pinpoint the Performance System deficiencies related to the work environment:

- Is the input the Performer receives appropriate, correct, and timely?
- Are job procedures and work flow effective?
- Have multiple or competing priorities been clarified?
- Are adequate resources available: time, people, money, information, tools, or support equipment?
- Do the physical surroundings support effective performance?

The identification of specific weaknesses in the Situation component will indicate where changes are necessary to improve the likelihood of successful performance. While a full analysis of the Performance System should be completed before any solutions are implemented, clearly performance expectations drive successful performance.

The role of the leader is critical in ensuring that performance expectations are clear and understood by the Performer. Where teams of Performers are involved, the leader may need to clarify and confirm expectations with each individual. This will ensure that the context within which expectations are presented is compatible with individual preferred communication styles.

Performer

The Performer is usually an individual, but may also be a team or larger organizational unit. Performance is more likely to be successful if the Performer has the capabilities to complete the specific task or project.

The general question for assessing the Performer component of the Performance System is:

• How capable is the Performer to meet the performance expectations?

The pinpointed questions are:

• Does the Performer have the necessary knowledge and skill to perform?
• Does the Performer know why the performance is expected?
• Is the Performer well suited to the job?

Assessing the Performer component of the Performance System requires care. While the assessment of knowledge, skill, and understanding may be completed objectively, avoid making assumptions about the nature of individuals and how well suited they are to the job. The personal limitations of a Performer (physical, emotional, and intellectual) are more difficult to assess. But research suggests that, if the organization has been careful in initial selection of the Performer, subsequent difficulties arising from these limitations, or from preferred communication styles, are rare.

Developing solutions for the Performer component of the Performance System also requires care. Consult with the Performer about the best ways to achieve the appropriate levels of knowledge, skill, and understanding. You may choose to accommodate personal difficulties, particularly if they are temporary in nature. But in cases of a clear and continuing mismatch, call on the help of specialist resources before assuming that the Performer will be unable to perform in the long term.

Response

Responses are the specific, observable actions taken after perceiving signals in the environment. The Response may involve a single action or behavior, or may consist of several actions or behaviors.

When analyzing a performance issue, the logical place to start is with the Response. What actions or behaviors have actually occurred? The general questions to help gain that understanding are:

• What is the observed performance?
• How does it compare with expectations?
• What are the desired and undesired, or alternative, Responses?

Responses should always be pinpointed—described in behavioral terms, free of generalizations or labels. The description should be clear enough so that someone could

replicate the behavior or action simply by reading it. Where possible, track behavior and results over time, to determine variations and to assess the impact of changing behavior.

Consequences

Consequences are events or conditions that follow a Performer's Response and increase or decrease the probability that the behavior will occur again, given the same Situation. Consequences are useful in explaining why Responses are maintained or modified over time.

There are two types of Consequences that impact behavior: Encouraging or positive Consequences and discouraging or negative Consequences. Encouraging or positive Consequences reinforce behavior, and increase the probability that a particular Response will occur again. Think of these Consequences as rewards. Discouraging or negative Consequences reduce the probability that the Response will occur again.

Consequences are the most powerful (either encouraging or discouraging) when they occur immediately after the behavior or action and are relevant to the Performer.

Consequences should be recognized as encouraging or discouraging through the eyes of the beholder. Do not assume that because a particular Consequence was well intended,

it will have a positive effect on performance. For instance, a Performer may accomplish his or her part of a project well ahead of schedule. The leader, perhaps assuming that the individual likes to keep busy, assigns additional work. Instead of being thankful for the new challenge, the individual resents the additional workload, and in the future completes project assignments by the exact due date, and not a moment before.

The only way to tell if a Consequence operates as intended is to observe subsequent behavior. If a behavior is followed by Consequence X, and the behavior occurs again, you may assume that it is an encouraging Consequence. If a behavior is followed by Consequence Z, and the behavior disappears or the frequency drops dramatically, you may conclude that it is a discouraging Consequence, despite its intended effect.

Balance of Consequences

The Balance of Consequences demonstrates how the nature and timing of Consequences influences performance overall. Three aspects of Consequences are in question. First, consider how the Consequences to the Performer for the desired Response compare with Consequences to the Performer for other alternative, or undesired, Responses. Second, understand how Consequences to the Performer for the desired and undesired Responses compare with the Consequences to the organization for the same Responses. Finally, consider the influence of timing on the Balance of Consequences. Are Consequences experienced immediately after the behavior, or are they delayed?

Consequences that exert the strongest influence on behavior are those that are specific and personal to the Performer and that occur within the time frame of performance.

Understanding what the Consequences are for both the Performer and the organization is critical to understanding the Balance of Consequences. The basic question for assessing the influence of Consequences within the Performance System is:

How well do the Consequences encourage the expected performance?

Additional binary questions pinpoint potential deficiencies in Consequences:

- Are the Consequences immediate enough to encourage the desired Response?
- Are appropriate Consequences provided consistently?
- Are the Consequences significant to the Performer?
- On balance, do the Consequences encourage the desired performance?

While it may not always be possible to ensure only positive Consequences for desired performance, you can usually influence performance by adjusting, adding, or aligning Consequences. The goal is to provide Consequences that are relevant to an individual or a group of Performers. The reaction to Consequences will certainly be influenced by the Performer's preferred communication style.

Feedback

Feedback is the performance-based information that Performers receive about progress toward a goal that guides them in maintaining or modifying behavior. Feedback is one of the most critical components in the Performance System, because it compares actual performance with expectations. Developing effective Feedback mechanisms should be one of the first steps in influencing performance, since improvement will only be sustained if the Performer is able to detect progress. An inadequate Feedback mechanism is one of the most frequent causes of deteriorating job performance, but deficiencies are relatively easy to correct, frequently requiring only redirection of existing information.

There are four major sources of Feedback, given here with examples:

- **The job itself:** noise, gauges, meters, charts, peer and customer reactions
- **The Performer:** the person checking work against some standard or model
- **The monitoring system:** the manager or coach, quality audit, project monitoring system
- **The receiving system:** a department or unit that receives and uses the Performer's output, the customer

If properly designed, the job itself serves as the most effective source of Feedback. This Feedback is the most immediate and frequent, and is objective in terms of the performance information and its delivery. The next best option is to provide the Performer with the resources to check personal performance and record progress.

Characteristics of Effective Feedback

Frequent and Timely—Generally, the more frequent the Feedback, the greater the possibility of keeping the Performer from drifting off target. Delays in performance Feedback are costly because substandard work continues to be produced during that interval. As time passes, the corrective effect of information is reduced. The Performer may have difficulty remembering what specifically went well or wrong, and relating proposed solutions to the performance in question.

Relevant—People will respond to whatever is measured and communicated to them. Rather than measure against every performance expectation, it is better to determine what is most relevant and significant to the job and provide Feedback only on those standards. When performance is in jeopardy because of outputs or behaviors, the leader should focus on more detailed measures and provide Feedback accordingly.

However, it is important to measure all facets of relevant performance. Measuring only quantity or cost will be detrimental to other important dimensions of performance, such as quality.

Feedback should be objective information from an unbiased source, assessed against an agreed standard, and showing progress toward that goal. When the Feedback includes criticism, it also acts as a Consequence. The Performer will tend to react emotionally and defensively, failing to respond to the information contained in the Feedback.

Specific and Accurate—The Feedback must be specific enough to allow the Performer to distinguish the effects of performance, and how performance has varied over time. The comment "nice job," for example, does not tell the Performer about the details or trends of performance and what to do the next time to repeat success. Pinpointed evidence of inappropriate behaviors or actions is more likely to guide improvement than "unsatisfactory."

The information provided about performance is what differentiates Feedback from Consequences. The Performer will find the information valuable only if its accuracy can be trusted.

Noise-Free—Information needed for effective Feedback is often mixed with irrelevant details or buried in massive amounts of data. This "noise in the system" frequently masks useful information. For example, a sales manager may receive numerous computer printouts each week with extensive data on the marketplace and competition. While certain pieces of information on the printout would indicate the effectiveness of last week's sales activities and guide next week's plan, the effort required to retrieve the information seems greater than the possible benefit. The sales manager throws the printouts away.

Confirmed by the Performer—Feedback is valuable only if it results in the Performer maintaining or modifying behavior. For this to take place, the Performer must agree with and accept the Feedback. When the source of Feedback is a gauge, chart, or information

system, the Performer must be able to confirm the accuracy and completeness of the data. When the Feedback is given by another person, both people should discuss and confirm the information and its interpretation, before actions are agreed. The general question for assessing the Feedback component of the Performance System is:

- How appropriate is the Feedback and how well is it used to influence performance?

The pinpointed questions that help analyze Feedback are:

- Does the Performer receive any information about performance?
- Is the Feedback used to encourage the desired performance?
- Are relevant measures of performance being fed back?
- Does the Feedback include information about progress over time?
- Does the Performer receive timely Feedback?
- Does the Performer receive Feedback frequently enough to maintain or enhance performance?
- Is the Feedback specific enough to influence performance?
- Does the Feedback include information about the value of the performance to the organization?
- Is the Feedback communicated in a positive, non-threatening manner?

One of the challenges of adjusting a Feedback system to improve performance is to ensure that information is provided in a context relevant to the Performer. The leader and Performer should collaborate to design the most appropriate mechanism.

Summary

In an effective Performance System, people know what is expected of them. The need for performance is clearly communicated and standards exist by which to judge success. There is minimal task interference—other tasks do not interrupt or create conflicting job demands. Feedback is frequent and relevant, providing the information the Performer needs to maintain or modify behavior over time, and achieve the results the organization values.

The Performer knows how to carry out the task, and is skilled and willing to do so. The necessary equipment, budget, personnel, procedures, methods, and other support systems are in place and function as intended. Finally, the Consequences are balanced. The Performer is rewarded for performing as desired or expected, and there are few incentives for undesired Responses.

This Performance System is an ideal. By careful analysis and collaboration between the leader and Performer, it is possible to approximate the ideal. Considering the individual in proper perspective with other Performance System components allows exemplary performance to flourish.

Instructions

1. Take one of your priority concerns that involves the performance of others. Write the concern below.

    _____
    _____
    _____

2. a. Briefly describe what the performance should be. Include what the Performer should be doing, where it should be done, when the work should start and stop, and some description of how you will judge the quality of the work.

    _____
    _____
    _____

    b. Briefly describe what actually is happening. Be specific. What is actually observed?

    _____
    _____
    _____

3. Use the modified Problem Analysis questions and a Problem Analysis worksheet to develop a Problem Statement and Specification. Find very closely related IS NOTs. Find similar Performers doing the same work. Find similar work this Performer does successfully.

4. Consider whether clear expectations have been set, whether the work environment supports performance, and whether the Performer has the necessary knowledge and skills to meet expectations.

    _____
    _____
    _____

5. What are the Consequences the Performers experience for their performance?

    _____
    _____
    _____

6. What Feedback do the Performers receive about their performance?

    _____
    _____
    _____

7. What is different, odd, unique, or unusual about the Performer (IS) compared to the other Performers (IS NOTs) in question? What is different about the other work the Performer does?

    _____

    _____

    _____

8. What causes do these distinctions suggest?

    _____

    _____

    _____

9. Plan how you will complete your analysis. Carefully consider what assumptions each cause implies. How will you know what is influencing performance before taking action? Consider discussing and collaborating with the Performer to change the Performance System.

    _____

    _____

    _____

10. What problems might your corrective action create? What will you do to minimize or prevent the impact?

    _____

    _____

    _____