Human Performance Problems and Their Solutions
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HUMAN PERFORMANCE PROBLEMS
AND THEIR SOLUTIONS

Geary A. Rummler

This is a framework for looking at performance problems that serves as a trouble-shooting guide for managers.

Few people would argue with the statement that managers are more successful in solving machine and system problems than in solving problems involving human performance. Part of this lack of success can be attributed to the complexity, unpredictability, and general "uniqueness" of human beings. A major part of our failure at solving people-centered or people-related performance problems, however, is our failure to analyze these problems completely before we try to solve them. If we were more effective at analyzing people problems, we could significantly reduce the number of such problems.

There are several factors that contribute to our lack of success in analyzing human-performance problems. First, when people are involved, we react to our biases or assumptions about human nature. Second, we are led by all the training courses and programs available, and by the staff people who support them, to separate human-performance problems from the job—from the complex environment in which they occur. We apparently assume the cause and solution of the problem are completely wrapped up within the individual—that the problem or the individual is in no way influenced by the unclear standards, the inconsistent interpretation of those standards by supervision, or the built-in conflicts surrounding most jobs in most organizations. Why else would we conclude that a manager "can't handle people" and send him off to a general course in "human relations" or "communications"?

Finally, there is really no useful, operational way for the manager to analyze performance problems, though there are some interesting theories about what makes people "tick." Perhaps, for example, it makes a manager more comfortable to hypothesize a problem-performer’s "hierarchy of needs"—but it doesn’t help him solve the problem. Such theories may be useful to corporate staffs, who can design policies and procedures sensitive to what are supposedly "satisfiers" and "dissatisfiers," but understanding people at some abstract level is a long way from solving performance problems, as most managers know.

The lack of any effective way of analyzing performance problems is reflected in the labels used by managers in describing "problems"—poor performance is the result of "poor motivation" and "poor attitude." These terms are not useful; they don’t say anything, they don’t lead us to any real solutions. Frequently, the result is that the performer who has the vaguely stated performance problem is exposed to a training program with an equally vague title, again, such as "communications" or "human relations."

This article is concerned with a viewpoint for analyzing human performance problems. It provides managers with a framework for examining performance problems—a framework that cuts through the level of generalities we are used to and in so doing identifies specific, workable, nonmagical solutions to problems. An integral part of this approach...
is to examine the performer in his environment. The approach in fact concentrates on the dynamics of the relationship between the performer and his environment.

Moreover, the approach has the potential of overcoming our personal bias about people by ignoring it. Concentrating on the performance desired, and those factors in the environment that influence it, makes bias and assumptions about human nature less relevant, if not totally irrelevant (thereby deemphasizing the need for the currently popular training in awareness, prejudice, and sensitivity).

**Could He Do It If His Life Depended On It?**

For the most part, human performance deficiencies can be classified as deficiencies of knowledge, which result from an employee's not knowing what to do, how to do it, or when to do it; or as deficiencies of execution, which result from an employee's failing to perform because of factors in the work environment; or as some combination of the two.

Distinguishing between deficiencies of knowledge and execution is a critical step in analyzing people-centered performance problems. A frequent result of failure to make this distinction accurately is that extended and expensive training is conducted in a doomed attempt to solve a supposed knowledge problem that is in fact an execution problem—a nontraining problem. In addition to being a waste of money, such training tends to reduce the credibility of the organization with the employee being trained, and frequently leaves management with the dangerous illusion that the performance problem in question is being solved.

This critical distinction between a deficiency of execution (D/e) and a deficiency of knowledge (D/k) can usually be made by getting the answers to these questions:

1. What is the desired performance (job outcome)?
   What are the job standards?
   Says who?
   Does everybody agree on those standards?
   Does everybody (anybody) know whether these standards are now being met?

2. What are the specific performance differences between actual and expected performance?
   Has anyone ever performed as required?
   Who?
   When?

3. Could employees perform properly if their lives depended on it?
   Did employees perform properly when they first came on the job?

4. Do employees whose performance is deficient know:
   What is expected of them?
   That they are not performing correctly and how far they are from expected performance?
   How to perform correctly?
   When to perform?

5. What positive/negative consequences of performing correctly/incorrectly can employees expect:
   From their bosses?
   From their subordinates?
   From their peers?

As an example of what can happen if these questions are not asked, consider the case of the personnel function of a large bank that was about to launch an extensive three-day program for all managers on "employee appraisal," in order to revitalize the current three-year-old appraisal program. A day was to be spent exhorting the executives on the importance of accurate employee appraisal and two days were to be spent in skill-training for conducting appraisal interviews, complete with videotape feedback on interview performance. Fortunately, before this program got off the ground and valuable management time and training-development money were expended, someone asked these questions:

1. **What exactly was the problem? How did "poor attitude" toward the existing appraisal system manifest itself?** The problem indicators included the fact that the annual review forms were returned to the personnel office weeks and sometimes months later. More important, a recent review of the evaluations showed that of the possible ratings of "outstanding," "excellent," "good," "fair," and "poor" for each item, the rating "good" was checked for nearly all items. (The items being evaluated were personality-oriented—e.g., initiative, ability to get along with others, thoroughness, integrity.) What had alarmed the personnel department was that the appraisal system did not discriminate among good and poor employees and was useless as a guide for manpower-planning and promotion. The conclusion was that managers didn't know how to evaluate performance properly.
2. Has anyone ever performed as required? When? Yes. When the program first began three years ago, the managers did a good job, as reflected in the evaluations, which showed a distribution of employees along the scale “outstanding” to “poor.” Even now, a new manager will occasionally conduct an “accurate” appraisal when he first comes on the job.

3. What are the consequences to a manager of performing correctly and incorrectly—i.e., of accurately recording a subordinate’s performance versus “going down the middle” with “goods”? The answers to this question were not easily articulated by the organization. Through observation and informal discussions with individual managers, it was learned that these consequences were frequently forthcoming:

- Predictably, subordinates did not like being told they were below “good.” Their reactions to such a rating were unpleasant, to put it mildly. The nature of the personality items on the form left considerable room for judgment and frequently made the review session with a subordinate more of a negotiating session.
- Over time, it became apparent that employees whose overall performance was considered excellent or outstanding were promoted out of the department and that any employee whose overall performance was fair or poor attracted attention from Personnel and resulted in time-consuming explanations and commitments to develop the substandard performer.
- Finally, Personnel came to use the appraisal as a cross-check on the raises recommended by managers. The theory was that an outstanding performer should get a larger raise than a fair performer. The reality facing the manager was that he had to respond to better job offers from other organizations and the need to attract and keep new people. By rating everyone approximately the same (no large deviations), he had more flexibility in awarding raises.

In short, managers received basically positive consequences for their “poor” performance in appraising employees and fairly negative consequences for performing as desired by Personnel. Performance had deteriorated over the three years, not because managers forgot—but because they learned. All the refresher training in appraisal interviewing in the world would not help. Instead, the appraisal system underwent a major overhaul, the first step being to provide for appraisal along dimensions other than the vagaries of personality.

The managers in this example would have been able to perform properly “if their lives depended on it”—as could most problem-performers. In fact, performance problems caused by deficiencies of knowledge are by far the smaller category. It is a safe bet to say that of those problems initially identified as “training” problems, only 15 to 20% can in any way be solved through some form of training, formal or informal. The big problem area, and the area in which we are the least effective, is the deficiency of execution.

Analyzing Deficiencies of Execution

Part of our ineffectiveness in solving deficiencies of execution is that we have few useful models for looking at performance. As a result, we conclude that people don’t care, aren’t motivated, have lousy attitudes, and so on. Although such conclusions may be true to a certain extent, a majority of problems initially diagnosed as attributable to such causes can be solved by using a more refined model.

Deficiencies of execution, or the failure to exhibit learned behavior on the job, can further be classified as resulting from:

- Lack of feedback. This problem arises when the person either does not know that the behavior is important or does not know that he is failing to perform to standard. The solution to this problem is to design and implement an adequate feedback system.
- Task interference. Here, the person cannot perform as desired because he lacks the tools or because the layout or organization of the job is such as to interfere with proper performance. The solution to this problem is job engineering.
- Punishment or unfavorable consequences. In this case, the person has no incentive for performing as desired; frequently, even it is against his own best short-term interests to do so. The solution to this problem is to change the consequences attendant on the job so as to encourage proper performance.

Another example will help illustrate this further classification of D/e’s: A major manufacturer and distributor of typewriters was lamenting the poor
motivation of its repair service men because of their lack of enthusiasm for a program by which they were to report sales leads to salesmen in their district offices. The program had begun with great fanfare a year ago and had netted a sizable number of sales leads the first several months, but had slacked off to nothing. The procedure seemed simple enough. When a repairman identified a potential sale, he was to complete a card requesting several lines of basic information and drop the card in a box at the office next time he was in. Management was frustrated at the lack of performance and was considering quietly dropping the program altogether or “upping the ante” by providing a bonus for leads or a commission on ultimate sales.

A quick analysis showed the following:

* No feedback to the repairmen. The cards were picked up from the box by a clerk and were supposedly distributed to the salesmen—without any word to the repairmen. Sometimes cards were discarded because the information was incomplete. In such cases, the repairmen were never notified of the incompleteness in the data supplied.

- No positive consequences to the repairmen for completing and turning in the cards. The consequences necessary were not extravagant. One repairman said; “At least he could acknowledge that he got them.” Another observed, “The cheap guy didn’t even buy me a bottle at Christmas.” There were, however, some negative consequences in the form of salesman rebuffs, such as, “Thanks for nothing. I chased clear across the country to follow up on that ‘lead’ and found they were going out of business. Don’t do me any more favors.” It took only a couple of remarks like this to bring a repairman up short.

This “motivation” problem becomes something else when you look at it more closely. There is no feedback on the results of the desired behavior, there are no particular positive consequences for doing as desired, and in fact there is a risk of mild “punishment” for doing as desired. Perhaps the ante does have to be upped now to get and maintain the desired behavior. But this could have been maintained initially at little cost by providing feedback to the repairmen—in the form of as simple a thing as returning the card with a salesman’s notation: “Made sale on 11/2/71. Customer appreciated your suggestion. Thanks.”

This feedback / task-interference / consequence framework is extremely powerful. It can be used to analyze existing problems, predict problems before a job or system change is made, or solve problems. It provides an alternative to using labels such as “motivation,” “communication,” and “attitude” to describe problems. Now let’s look more closely at each of the three causes of D/e’s.

**Feedback Problems**

The individual performer is guided by the feedback he receives about his performance. In most cases where an individual agrees with the work goals, he will improve if he knows: 1) He is off target. 2) How to correct or get on target. If an individual fails to get feedback on his performance, he will begin to develop his own explanations of good and bad performance, of cause and effect—and he will...
inevitably develop superstitious behavior (i.e., he will erroneously attribute effects to certain causes).

The critical characteristics of effective feedback include:

**Frequency.** Generally, the more frequent the feedback, the better.

**Immediacy.** There should be little delay between the performance error and the feedback concerning it.

**Specificity.** The feedback must in essence be "constructive criticism," in that it should differentiate the effects of various dimensions of performance.

**Understandability.** The units used in stating the amount by which performance falls short should be clear to the person receiving the feedback.

**Positive orientation.** The feedback should stress attainable performance subgoals, rather than punitive consequences—that is, reinforcement, rather than enforcement.

Most organizations abound with examples of poor feedback—computer printouts on last month's performance received three weeks into the next month (too infrequent, too late); production figures that lump all shifts together and memos to field noting "...a drop in overall performance which must be corrected" (not specific); and top management comment only when there is a negative exception, which means "no news is good news."

Frequently, performance can be dramatically improved by improving feedback. Usually this requires collecting no new data, but simply redistributing existing data in a more useful format. Witness the following case. A vice president of an international freight company was concerned with the infrequency of container use by dockmen. Containerizing shipments represented a possible $20 saving in shipping costs for each container used. At one location, however, only 10 out of a possible 30 containers were being used on an average day. The 20 containers not used each day represented a $400-per-day lost saving. Multiplying by 260 working days yields a possible $104,000 annual saving through containerization that the company was failing to capitalize on. After observing freight handlers’ performance at one location, the vice president concluded that workers were sufficiently familiar with the criteria for using containers. He found, however, that the freight handlers were unaware of the cost-benefits of containerization and had no specific standards against which to measure their performance.

The vice president’s remedy was amazingly simple. He established 95% as the standard for containerizing shipments. (He maintained that no task can be done perfectly 100% of the time.) He made workers aware of the standard through their supervisors. The feedback system centered on a chart posted conspicuously in the freight terminal. On a typical day it read: OUT OF A POSSIBLE 30 CONTAINERS WE USED 25 TODAY. In this way, freight handlers knew exactly how well they had performed in relation to standard.

The results? One week after the feedback system was implemented, performance soared from 30% to 86% of standard and it’s been improving ever since. When examining a performance problem that might be caused in part by lack of feedback, the following checklist of possible actions should point to effective corrective action.

**Can performance be improved by:**

1. Setting standards?
2. Stating existing standards in a shorter time frame (e.g., units per hour rather than per day)?
3. Providing feedback on:
   a. Fewer dimensions of performance?
   b. Different dimensions?
   c. Additional dimensions?
4. Designing the job so the performer can tell whether he is not performing properly (and if not, why not)?
5. Making the feedback message:
   a. More specific (e.g., by foreman rather than shift)?
   b. Less full of "noise" (e.g., on a single sheet, not as two inches of computer printout)?
6. Having the message delivered by a more objective and positive source?
7. Changing the format to show:
   a. Cumulative performance record (a history)?
   b. Composite of various performance indicators (for comparison)?
8. Increasing frequency?
9. Providing permanent storage for comparison by performer (a memory system)?

**Consequence Problems**

A person's performance is strongly influenced by the consequences he suffers or enjoys as a result of that performance. The consequences of performance may be positive, negative, or, for all practical purposes, nonexistent. They may also be immediate or long-term, and real or potential. Finally, they come
simultaneously from a number of sources, including the work itself, subordinates, peers, bosses, and the organizational establishment. The result is that a person's "performance system" is a dynamic, multidimensional set of factors that significantly influence his behavior.

It follows that proper management of consequences is critical in maintaining desired performance. This is particularly true in organizational settings where a complex environment of people, equipment, and events continuously metes out consequences. The frequent, random, and arbitrary consequences that naturally occur in the organization must be brought under management's control, balanced, and managed in a way to support the desired performance.

Poor performance can frequently be traced to the fact that the organization (system, situations, procedures) inadvertently provides negative consequences for—that is, "punishes"—the desired behavior. Earlier, we reviewed the appraisal-interviewing case, where managers received negative consequences for accurately recording the performance of subordinates. We realize that "good" managers and employees should rise above this adversity and do what is correct. And most try to for a while, but are worn down over time or by the unrelenting nature of the negative consequences.

The long-term results of these inadvertent punishers are usually extremely costly. For example, the negative consequences of having more than 4% scrap on the production line drives many a sane and rational foreman to report only 4% when he has 7%—and to do extreme things to "bury" that remaining 3% scrap. The result to the company will be excessive metal costs, an inventory shortage, scheduling headaches, and overtime to meet the inventory shortage.

A more subtle but frequent problem is exemplified by the airline manager who sought training in "decision-making" for his airport-terminal ticket-counter supervisors. When pressed for an example of poor decision-making, he was able to cite only the failure to add additional staff to the counter when the passenger lines extended beyond a certain point. The training analyst asked the counter supervisors why they didn't add staff under these circumstances. One replied that he had done so once, but got "burned" because it caused an overrun in the overtime budget. Now when he sees a need for additional staff, he calls his supervisor and asks him to decide. Not surprisingly, the supervisor's supervisor said much the same thing. Now he asks the manager, rather than run the risk of all that "heat." There are several costs that result from this set of negative consequences. One is the loss of service to customers and the possible loss of revenues. The other—the more insidious one—is that the manager is now bogged down making all manner of decisions that should be made two levels below him.

Sensitivity to the power of consequences will not only help analyze problems, but also will help predict problems. For example, the marketing function of a bank decided that it would launch a major training program for tellers in all its branches. The objective was to have tellers "sell" additional bank services, with particular emphasis on personal loans. Although the marketing staff was convincing in its argument that personal loans were extremely profitable, the program was doomed to failure because of the existing structure of consequences in the branches. First, there were immediate negative consequences to the tellers for errors in handling money, failure to balance out at the end of the day, and taking bad checks. This, coupled with long lines, kept the tellers' mind on the essentials: no fancy stuff. Second, there was no support from branch management for the personal-loan emphasis. The positive consequences for the branch manager (attracting attention downtown) were for building up a sizeable loan portfolio—which could be done quicker and at less cost by making a $1,000,000 loan to a small corporation. It takes a lot of $3,000 personal loans (and considerable expense per loan) to equal $1,000,000.

Given these two sets of consequences, thirty weeks of training in "selling services" would have negligible effect on personal loans as long as the balance of consequences itself was unchanged.

The following principles are basic to analyzing the balance of positive and negative consequences to performers.

A consequence may be positive, neutral, or negative, depending on the individual, the time, and the circumstances.

If a behavior continues, the balance of consequences is positive.

If there are positive consequences for two mutual-
ly exclusive behaviors, the one with the greater positive consequence will occur.

The further removed in time a consequence is from a behavior, the less effect that consequence will have on the behavior.

The consequences that control the behavior are those that have value to the individual.

These principles can be restated as the following guidelines for analyzing the consequences of an act to a person:

1. Frequently, people don't just not do something; they do something else instead. There is value, therefore, in looking at the consequences of both what is desired and what is currently happening (i.e., undesired).
2. Do not mistake company policy and platitudes (e.g., "You will get promoted") for real consequences to the individual (e.g., missing lunch with the fellas, having to do extra paperwork).
3. Separate immediate consequences (e.g., a sale today, holding up the car pool) from long-term consequences (e.g., week-end scrap report, monthly budget statement).
4. Consider the certainty of the consequence. We will often elect to engage in behavior with a high probability of immediate results (e.g., taking an extra 10 minutes for lunch, padding the call report) and low probability of negative consequences—i.e., getting caught.
5. Finally, remember that what one man considers a positive consequence, another man may consider very negative. Some people will bust their backs to get a chance to give a group presentation; others in the same office will go to extreme lengths to avoid such an "opportunity."

When trying to identify consequences and assess their power, you must be careful not to impose your value system on the analysis. You must look at what in fact is happening in the way of consequences and infer from your observations whether the consequences are positive or negative to the individual.

**TASK INTERFERENCE**

A number of very common causes of poor performance can be classified as "task interference"—that is, something interfering with the person's making the proper response in the desired situation. For a salesman, forms of task interference range from having to use a large, poorly laid-out parts or price manual to having more customers to call on than can possibly be done well in the time available.

In a manufacturing plant, task interference may range from a shortage of hand tools to an inadequate inventory-control system. Task interference describes those factors that make it either difficult or impossible to perform as desired. In addition to poor physical layout of a job, the major source of task interference is the lack of adequate resources—of time, tools or support equipment, or personnel.

Such problems can be identified by asking:

1. Is there enough time to perform the task?
2. Is there enough equipment to perform the task?
3. Are there enough support people and services to perform the task?
4. Are there competing tasks?
5. Are there things that distract the employee from the task?

Task-interference problems constantly creep into jobs as procedures are modified, assignments subtly change in scope, and systems slowly evolve. The problems can usually be solved by some form of job engineering. Although these kinds of problems are relatively straightforward and the solutions are far from profound, it is important that a manager identify and correct these problems. An employee may be slow to admit that such a problem exists or quick to work around it, assuming that it is "just one of those things." (In fact, human beings are generally so adaptive that they will be up to their ears in "just one of those things" unless someone keeps clearing them out of the way.) It is important that a manager identify task-interference problems and get the interference removed, or at least help a subordinate figure out the optimal way to get around the interference.

**"Troubleshooting" Performance Problems**

We have presented a framework for looking at performance problems and some guidelines for analyzing them. A number of questions can be added that will make this framework into a troubleshooting guide for managers. First, we must determine whether there is in fact a real problem (e.g., is the symptom of "can't make decisions" in fact backed up by a performance discrepancy such as not enough ticket agents at the counter?) and whether the problem is in fact worth solving (e.g., what is
A GUIDE FOR TROUBLESHOOTING PERFORMANCE PROBLEMS

A. IS THERE A PROBLEM?

1. How long has this been a problem?
2. How general a problem is it?
   • Where does it occur?
   • When does it occur?
   • How frequently does it occur?
   • Does it ever not occur in some locations or at some times?
3. How will you know when the problem is solved?
   • How will things look different?
   • What numbers will increase or decrease?

B. WHAT IS THE PROBLEM?

1. Who is the performer in question?
2. What is the desired action?

3. What specifically does he perform incorrectly?
4. Does he ever perform correctly?
   If yes: When?
   If no: Has anyone ever performed correctly?
   When?
   Where?

C. IS THE PROBLEM IMPORTANT?

What impact does the incorrect performance have on:

1. The product or service?
   Quality  Cost  Quantity
2. The company?
   Procedures  Image
3. The performer or his department?
   Safety  Ease of Work
4. Other workers or departments?
   Safety  Ease of Work

D. WHERE HAS THE PERFORMANCE SYSTEM BROKEN DOWN?

Questions

1. Know he is supposed to take the desired action?
   • How do you know?
2. Know what the desired action is?
   • How do you know?
3. Know when to take the desired action?
   • How do you know?
4. Know how to take the desired action?
   • How do you know?
5. Know the standard or level of performance expected?
   • Are there standards?
   • Does everybody agree on them?
   • Is anyone meeting them now?
6. Know whether he is taking the desired action or not?
   • How can he tell whether he is doing correctly?
7. Have adequate resources (e.g., time, equipment) to take the desired action?
8. Receive negative consequences for taking the desired action?
   • Consider such sources of consequences as superiors, peers, subordinates, and the system.
9. Receive no consequences for taking the desired action?
10. Receive immediate, positive consequences for doing something other than the desired action?
    • Do “good” things happen to him if he doesn’t do it?
11. Receive no information on the consequences of taking the desired action?
    • Does he know it makes a difference to do it right?
12. Receive wrong information on the consequences of his actions?
    • Does information lead him to conclude he’s doing okay when he is not?
13. Receive information on consequences that is not sufficient for him to correct his performance (i.e., not clear, not specific, too late, too infrequent)?
    • Does he receive enough information to know how to correct?
14. Know how to interpret information in order to correct his performance?
    • Given good information, can he figure out how to change?

Action

If no: Instruct him.
If no: Instruct him.
If no: Instruct him.
If no: Instruct him.
If no: Set them.
If standards: Instruct in them.
If no: Redesign job.
   Instruct in observing.
   Provide feedback.
If no: Provide resources.
If yes: Remove negative consequences.
If yes: Provide positive consequences.
If yes: Remove positive consequences.
If no: Provide feedback.
If yes: Correct feedback.
If yes: Provide better feedback.

Instruct on how to interpret data.
the impact, economic or other, on customer wait time extending beyond X minutes?) Obviously, these are preliminary steps to forestall spending too much energy on solving a performance problem that either is no problem at all or is not worth solving. The second addition to the framework is the following very specific list of questions for probing a performance problem. The result is a troubleshooting guide for human-performance problems.

Summary

As we have indicated, this D/k-D/e framework can be used to analyze existing problems and to predict problems that might occur if changes in procedures or changes in emphasis on some performance variable are being considered. The value of this framework or template for viewing people-related performance problems is that:

1. It makes possible (in fact requires) a closer look at the problem. It forces us to get off the "communication" and "doesn't care" level of abstraction and to get down to specifying what exactly is desired and how what is desired is different from what we are currently getting. In so doing, we then examine systematically the variables that influence performance—the consequences, the feedback, and the barriers to performance.

2. It provides real and specific solutions. The solutions are not grand abstractions such as "Change his attitude" or "Motivate him," nor are they vague preambles to training-course titles such as "He needs some training in 'communication'" or "train him in 'human relations.' He can't handle men." The solutions that result from looking at performance problems from this viewpoint are specific ("He needs to have information on X every Y and in Z form" or "He will not do X as long as his supervisor persists in making him do Y every time he does"), and their implementation is frequently well within the domain and authority of management. There is little need to lateral the problem to staff—unless, of course, management doesn't want to face the problem, or really doesn't want it solved.

The value of this approach is considerable. Organization and managers who have systematically applied it have accumulated an impressive list of results. It is a useful tool for the individual manager, but it is all the more powerful when used as the common approach by all the management of an organization.

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