The Autonomous Performer

By Fred Nickols

Introduction

The reigning paradigm of human performance technology asserts that performance can be engineered.[1] This means the conditions necessary for performance to occur can be arranged thereby ensuring results. In this scheme of things, the conditions of performance are arranged by management, typically with the aid of a performance technologist, and the performance is accomplished by a human being referred to as "the performer."

This is a useful model for the kind of work where performance management relies on compliance. The kind of work involved is typically *prefigured*, which is to say *required results and work routines are defined in advance*. Requirements are communicated to the worker and subsequently monitored and enforced by management. Performance problems are deviations from these requirements and these deviations are detected and corrected by various means. Training is sometimes perceived as one of these means. Other means include providing the proper incentives, arranging for feedback or knowledge of results, and making certain that the working environment supports carrying out the work.

But what if work performance hinges on contribution instead of compliance? What if the work must be *configured* by the worker in response to the situation at hand? What if the worker, not the manager, defines the results and the routines and the resources required? What if the worker is the main or even sole repository for the standards that (a) define acceptable performance and (b) enable feedback? What if the performance in question reflects the actions of autonomous agents instead of compliant instruments? Are the conditions of performance then so easily arranged? Is worthy performance then so easily engineered?

[1] See Thomas F. Gilbert's book, *Human Competence: Engineering Worthy Performance*, for what is one of the best-known views of human performance technology.

My aim in this article is to explore the concept of the autonomous or self-governing performer, and to identify some ways in which performance technology must be defined and practiced differently to accommodate the hard reality that much if not most of the work in today's workplace is configured, not prefigured. We will begin with the distinction between prefigured and configured work.[2]

Prefigured and Configured Work

Work is a process with some resulting outcome or product. Prefigured work is work that has been defined and designed in advance for execution under a set of well-defined standard conditions. Prefigured work is usually defined and designed by someone other than the person who will be expected to do it. For many years this other person was an industrial engineer. Prefigured work is characterized by repetitive, usually unvarying, routines under standard conditions; the same tasks being performed again and again. Assembly line jobs are the archetypes of prefigured work.

Configured work is work that is defined and designed in place, in response to the situation at hand, and by the person(s) doing it. There might be some similarities from situation to situation, as is the case with some kinds of consulting engagements but more often than not the work situations are very different. For many people, configured work is illustrated by what are known as "special projects." Such projects often require the team members to collaborate in defining the mission of the project, setting its objectives and schedules, devising the means of achieving them, putting those means into effect, evaluating the results and adapting and adjusting along the way.

What should be clear from the descriptions above is that the locus of control is very different for prefigured and configured work. Prefigured work has an external locus of control, usually vested in management, and the aim of management is typically one of ensuring compliance. Configured work has an internal locus of control, vested in the performer, and the aim of management is (or should be) one of eliciting contribution and supporting the performance necessary to that contribution.[3]

In many respects, the differences between prefigured and configured work routines reflect the differences between manual work and knowledge work. The shift to knowledge work that transpired between 1920 and 1980 reversed the composition of the work force. In 1920, it was dominated by manual workers of one kind or another and the work was predominantly prefigured. By 1980, that dominance had been reversed. Today, the work force is dominated by knowledge workers or what former Labor Secretary Robert Reich called "symbolic analysts,"[4] and much work today is configured, not prefigured.

In the last analysis, the distinction between prefigured and configured work boils down to the view taken of the worker. For prefigured work routines, the common view taken of the worker or the performer is that of a passive, compliant instrument of management, an actor whose lines are scripted and then acted out under someone else's direction. For configured work routines, that view of the worker won't do. The worker or performer, in work groups or alone, must be viewed as self-governing, as an autonomous agent who

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[2] See Peter Drucker's book, *Management: Tasks ♦ Responsibilities ♦ Practices*, for what is probably the first discussion of prefigured and configured work routines.

[3] See my article, "Half A Needs Assessment: *What Is* in the World of Work and Working," for a more in-depth contrast of prefigured and configured work.

[4] See Reich's book, *The Work of Nations*.

acts on behalf of an employer, not simply at the behest of or in accordance with the dictates of management. Peter Drucker was addressing this very issue when he wrote regarding the knowledge worker, "Above all, no one can supervise him. He is the guardian of his own standards, of his own performance, and of his own objectives."[5]

Implications

In broad terms, the implications of the shift from prefigured to configured work are that the mission, models, methods, and marketing of performance technology are all on the table, up for review and revision.

Of all the implications of configured work and of autonomous performers, none is clearer than this: The *responsibility for work design and performance improvement must rest with the performer*. As Drucker wrote, "Management must retain a veto power, and will often exercise it. But the responsibility for job design and work group design belongs to those who are responsible for output and performance. And that is the worker and the work group."[6]

This shift in the responsibility for work design and performance improvement signals a corresponding shift in the mission of performance technology and performance technologists. The mission must shift from one of *applying* the technology on behalf of management to one of *transferring* the technology and know-how to the work force, of making it available for individual workers and work groups to use in configuring their work, of making it possible for them to engineer their own performance instead of having it engineered for them by someone else.

Beyond this shift in mission lies a requirement to modify the models that currently form the foundation of the practice of human performance technology. Human performance technology has its roots in radical behaviorism and the stimulus-response-reinforcement view of behavior. This view is very much reflected in the models of performance on which human performance technology is based.

The reigning models of human performance technology were developed by renowned names in the field such as Karen Brethower,[7] Tom Gilbert, Joe Harless, Bob Mager and Peter Pipe,[8] and Geary Rummler and his colleagues at the Praxis Corporation in the 1970s.[9] Setting aside minor variations, the essence of the message conveyed by these models can be summed up as follows:

> There is a great tendency to rely on training as the solution to many problems of job or task performance when in fact the problem is traceable to factors affecting performance other than the skill or knowledge of the performer. These other factors include but are not limited to the communication of expectations, the provision of suitable consequences and feedback, and managing task interference (e.g., clarifying competing priorities, ensuring well-designed work processes, and making the proper tools and equipment available). Tend to these other factors and the desired performance has a much higher likelihood of occurring.

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[5] *Management* (p.279).
[6] *ibid.* (p. 272).
[7] See her seminal article, "Maintenance Systems: The Neglected Half of Behavior Change."
[8] See Mager and Pipe's book, *Analyzing Performance Problems.*
[9] Praxis was later acquired by Kepner-Tregoe.

There are some underlying assumptions here. First is a causal link between behavior and performance, between actions and results. Although performance technologists are usually quick to distinguish between behavior and performance, the two are nonetheless inextricably linked. Second is an assumption that the actions required to produce a given result can be specified in advance, usually by some outside agent such as an industrial engineer or a performance analyst. In short, the work can be prefigured. Third is the assumption that this prefigured working activity can also be programmed, that is, shaped, influenced, and maintained as a result of various external interventions (e.g., training, incentives, feedback, and consequences).

The reigning model offers useful ways of looking at repetitive tasks intended to yield standard products under standard conditions. It is less useful in fluid working environments, where results must be achieved under widely varying and, on occasion, rapidly and radically changing circumstances. Under these conditions, performance is not so much a matter of mastering and then carrying out prefigured routines as it is a matter of configuring a response to the situation at hand. This kind of work requires flexibility, adaptability, and constancy of purpose on the part of the performer. It also means that problem solving is a core competency instead of an occasionally useful skill. Setting goals and objectives is an integral part of almost everyone's job instead of the sole prerogative of management. Planning, scheduling and even designing work falls not just to the industrial engineer but also to the worker. Many if not most of the people in today's workplace are better viewed as self-managing and self-controlling agents acting on behalf of their employer instead of as instruments to be managed and manipulated.

Let us look now at the distinction between behavior and performance.

Behavior and Performance

Behavior refers to activity and performance refers to results. A story from my early consulting days illustrates clearly this important distinction.

> A petite young woman was interviewing for a position as a field sales representative with a nationally known manufacturer of foods such as tea, salad dressings, and instant soups. The vice president of sales was conducting the interview. The director of sales training was betting the young woman would not get the job. The sales force was all male, it had been all male for a long time, and it was likely to remain that way. After all, the job frequently entailed lugging heavy boxes from the warehouse to the sales representative's car and from the car to the store. This was clearly a man's job. To everyone's surprise, the vice president of sales hired the young woman. When asked why, he replied, "Well, when I told her about the boxes, she smiled and said, 'Surely, you don't think I'm going to carry them myself, do you?'"

As the young woman saw it, her job was to get the boxes from the warehouse to her car and from her car to the store. That did not mean she had to lug them herself. Lugging behavior (at least on her part) was just one of many means for moving the boxes. The performance, the "accomplishment" as Gilbert termed it, was getting the boxes moved.

With this distinction between behavior and performance in mind, let us examine the elements in the GAP-ACT model shown in Figure 1.

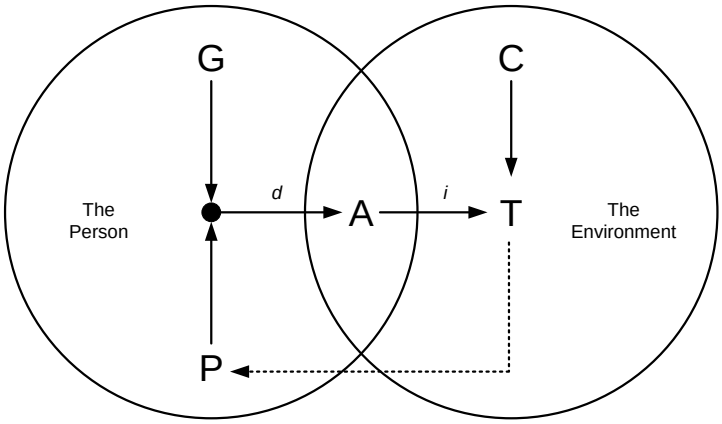

Figure 1 – GAP-ACT Model of Human Behavior and Performance

The GAP-ACT Model

The GAP-ACT model acknowledges the autonomous nature of human beings. It also recognizes that performance on the job is increasingly a matter of configuring courses of action instead of carrying out prefigured routines. It is a model that reflects self-control not external control. The model helps keep in mind the distinction between behavior and performance while, at the same time, keeping their relationship intact and in the forefront of one's thinking and analyses. It reminds us that without behavior there is no performance.

Target Variables (T)

People attempt to control – or at least influence – various aspects of their environment. In Figure 1, these targeted variables are represented by the letter T. For a salesperson, the variable in question might be the number of sales or number of new accounts or perhaps the profitability of a given sale. For a manager overseeing a processing operation, the targeted variable might be the error rate or quality of output or perhaps the volume of output.

Goal States (G)

In their efforts to control or influence T, people set goals that define the desired state of T. Goals are represented in Figure 1 by G. The salesperson might have a goal of five new accounts per month or a dollar sales volume of $50,000 per month and the operations manager might set a goal of an error rate of .05 percent or less.

Perceptions (P)

All that anyone knows of the actual state of T they know by way of their perceptions. This is true whether they are directly observing T or reading a report on the condition of T. Perceptions are represented in Figure 1 by P.

Actions (A)

As part of their effort to influence or control T, people compare their perceptions of T with their goals for T. Any difference or discrepancy between the perceived state of T and the goal state for T is represented in Figure 1 by the lower-case *d* on the line leading from the juncture of P and G. A discrepancy results in action. Action is represented by A in Figure 1.

These first three elements, goals (G), actions (A) and perceptions (P) comprise the GAP portion of the GAP-ACT model.

Actions are taken so as to bring the perceived state of T into alignment with the goal state for T. These actions are purposeful and purposeful action has a name: intervention. In Figure 1, purposeful action or intervention is represented by the lower-case *i* on the line leading from A to the juncture of C and T.

Complicating Conditions (C)

Were there no other factors affecting T, our actions would have the desired effect; namely, closing any gap between our goal for T and our perception of it. But there are other actors and factors at work. The salesperson's goal for T might be complicated by the customer's perception of the quality or the prices of the products or services being sold. It might also be confounded by the actions of competitors. The manager's efforts to realize an error rate of .05 percent or less might be thwarted by the skill levels of the people carrying out the process in question or perhaps the quality of input materials to the process. Our efforts to control or influence some targeted variable are almost always susceptible to disturbances by complicating and confounding conditions. These conditions are identified in Figure 1 by the letter C.

We act, then, so as to influence T. But T is also influenced by C and thus, any changes in T represent the net effect of our actions and these other influences. Ordinarily, we are able to adjust and adapt our actions so as to counter, offset or negate these other factors. On occasion, we are not. The disturbances to T posed by C overwhelm our actions and T does not align with our goal state. The salesperson loses too many sales to a competitor who has a better quality and lower-priced product. The manager finds that employee turnover results in a lack of skilled and knowledgeable staff, making process performance suffer.

Fortunately, for the most part, we are able to adjust to any disturbances posed by C. We manage to keep T aligned with G as revealed to us via P. Through it all, we vary our actions to as to hold results constant. The actions, conditions and target elements constitute the ACT portion of the GAP-ACT model.

In summary, if we see a GAP, we ACT. An easy way to remember the elements in this model is the name itself: GAP-ACT. A gap is a difference between a goal state (G) and the perceived state (P) of some variable we wish to influence or control. Actions (A) are intended to impact the targeted variable (T). Other confounding and complicating conditions (C) also affect T. This requires us to vary our actions so as to keep our perceptions of T aligned with our goals for T.

In his important book, *Behavior: The Control of Perception*, William T. Powers (1973) observed that we vary our behavior in response to changing conditions so as to hold our

perceptions of desired results constant. Essentially, our behavior serves to achieve and maintain alignment between our perceptions and internally held reference conditions or goals. That these reference conditions might be only temporarily adopted or easily discarded makes no difference. Once perceptions and goals are aligned, this alignment is also maintained. We counter, negate, and otherwise offset any disturbances to the state of our targeted variables. When I act to maintain a goal state it no doubt looks to other people as though I am resisting change. I am but that does not mean I am generally resistant to change, it means only that I am resisting that particular change, which I view as a disturbance. When other people manipulate the contrived consequences of my behavior or performance, their actions look to me a lot like manipulation. Depending on the meaning I attach to those contrived consequences (and the motives I ascribe to those doing the contriving), I might or might not behave in ways that are consistent with their perceptions and goals, but I will always behave in ways that maintain alignment between my perceptions and my goals. The same is true of other people. This view of people as self-governing requires some rethinking of human performance technology.

Refocusing and Repositioning Performance Technology

The shift in responsibility for the design and management of configured work to the worker and the work group means the market for performance technology has moved. Workers and work groups are the new users for what performance technologists have to offer. They are the clients, too. They are no longer the targets. The methods of performance technology must be refocused, repackaged, and repositioned in response to this change in the marketplace.

The current marketing of performance technology centers on *applying* the technology *to* the performance of individuals and work groups. It must center instead on *transferring* the technology to individuals and work groups for use *by* them. Performance analysis must be situated in the work group, not in some staff group or external consulting firm. Performance technology must be repositioned as a design methodology, not just a diagnostic framework. In other words, it must be repositioned for use in *preventing* performance problems, not simply correcting them. To paraphrase Joe Harless, "An ounce of design is worth a pound of diagnosis."[10]

Summary

The nature of work requires many if not most people in today's workplace to configure their responses to the situations they encounter instead of simply carrying out routines that have been prefigured for them by others. Successful performance hinges on performers who are best thought of as autonomous agents, not compliant instruments. In turn, this requires us to acknowledge what has been there all along – the autonomous or self-governing nature of human beings.

The autonomous or self-governing nature of performers in today's workplace carries with it important implications for performance technology and performance technologists. Chief among them is that performance technology must be practiced and applied by workers and work groups in the course of configuring their work. No longer can we afford to have it applied primarily by performance technology specialists acting as advisors to managers who are trying to solve performance problems after they have occurred.

[10] I refer here to Joe's important booklet, *An Ounce of Analysis is Worth a Pound of Objectives*.

In short, if worthy performance is to be engineered, workers and work groups must engineer it.

In general, the shift from prefigured to configured work has implications for performance technology that call for changes in its mission, models, methods, and marketing. Effecting these changes is one of the chief challenges facing performance technologists today.

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