

Creating a High Performance Organization Through a “Free Operant Workplace”

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Organizations have been managed in much the same way for thousands of years. Our management model is based on the military, which was one of the earliest attempts to get a group of people to act toward a common goal. The original purposes of the military management hierarchy were to ensure the battle strategy was communicated effectively to large numbers of troops, and to provide direct supervision of the troops to make sure they carried out the orders.

Just as the military has generals, captains, sergeants, privates and so on, the typical organization has a CEO, division managers, supervisors, and workers. The purposes of the organizational management hierarchy are the same: command and control. Though technology has radically changed since organizations were first developed, little has changed in the way organizations are managed. Recent advances in our understanding of human behavior in organizations point to an exciting alternative - the “free operant workplace”.

Most entrepreneurs create organizational cultures they would never work in themselves! If they did, they would never survive the close supervision, hierarchical decision-making, and the demands for a strict adherence to the “rules”. The management system we have today is little different from the one described by Whyte in “The Organization Man” (Whyte, 1957). It is telling to note that the executives at the top of an organization's pyramid are free to create and innovate, but as you move down the pyramid more and more restrictions regarding what can and cannot be done are enforced.

To survive, start-up companies require a fluid environment that reinforces (socially and financially) individual initiative and proactivity. Only in this way can they adapt to the rapid changes involved in a new business venture. In the American culture, we admire creativity, innovation and risk-taking because these are the people who make our culture successful for all of us.

The prototype of a free operant organization is the Lincoln Electric Company in Cleveland, Ohio. Lincoln manufactures world-class welding equipment. Mr. Lincoln founded the company with a unique management system. Instead of instituting the traditional management hierarchy, each worker's results would be objectively measured. Rather than a wage, each worker would be paid on what he produced and the profitability of the company.

The results of this management system have been remarkable. Where most organizations have one manager or supervisor for every seven to ten employees, Lincoln's ratio is one hundred employees per manager. Lincoln boasts they have the highest paid workers in the world. Lincoln offers lifetime employment and has never had a layoff in its sixty-year history. This is possible, as will be discussed, because pay is directly indexed to Lincoln's profits. As a result of unlimited earnings potential and a guaranteed job, employee turnover is only .2%. When you walk into the Lincoln plant you see a sign that states, “No one may begin work before 8:00 A.M.”

THE FREE OPERANT

B.F. Skinner is known for his theory of behavior and especially for his concepts of positive and negative reinforcement. Most people are less familiar with a key distinction he drew between traditional psychology's “response” and his concept of the “free operant”. Pavlov's earlier formulation viewed

behavior as a “response” that was elicited by a “stimulus”. In contrast, Skinner viewed most human behavior as emitted and then “shaped” by environmental consequences. He thought Pavlov's elicited response was too restrictive and mechanical to adequately explain the variety and complexity of human behavior.

Skinner defined an operant as a class of behaviors that produced a common result. The frequency of specific behaviors is guided by how efficiently they produce the result. The “operator” is free to determine the best solution through exploration and at her own pace. This is a very different perspective from that of behavioral and industrial engineering where experts determine the ideal behaviors and then require employees to perform within narrow behavioral guidelines. Engineers, like Deming, see variation in behaviors as a problem. The free operant view sees variation in behaviors as a necessity for continuous improvement and adaptation.

In Skinner's view, people are not automatons that are pushed around by environmental stimuli. Rather, they actively engage the situations they find themselves in with curiosity, exploration, and learning. Through exploring their environments, they learn the best means for optimizing their effectiveness in various situations.

Skinner's theory of the “free operant” parallels Charles Darwin's “natural selection”, and economist Adam Smith's “free market”. The common point in these three concepts is the importance of “variation”. Genetic variation (mutation) is central to Darwin's theory of evolution. Mutations that make the organism more likely to survive and procreate are “selected” by the environment (survival of the fittest).

I have called this principle, by which each slight variation, if useful, is preserved, by the term Natural Selection (Darwin, 1859).

Similarly, the free exchange of goods and services is the foundation of the economist Adam Smith's free market.

Every individual necessarily labors to render the annual revenue of society as great as he can. He generally neither intends to promote the public interest, nor knows how much he is promoting it... He intends only his own gain, and he is, in this, as in many other cases, led by an invisible hand to promote an end which was not part of his intention (Smith, 1776).

A farmer harvests his crop and sells it to a granary. The granary then pays another organization to transport the crop to a food processor that then sells the product to a distributor. The distributor sells to a grocer, who then finally sells the product to a consumer. Who manages this complex process? The marketplace drives it. In each transaction one party is a seller and the other is a buyer. Their mutual interests coordinate each transaction. There is no leader - only a marketplace.

Individual organisms mutate genetic variations that alter behaviors or structures that are, if useful, sustained by their environments. Individuals in a free market try various approaches to making a living and continue those that prove successful. People explore new situations to determine the best means of functioning effectively within them. These principles have much in common. Unfortunately, they are often poorly understood and misinterpreted.

This misunderstanding stems from our interpretation of human behavior in terms of cause and effect. We look for a prior cause that will explain a person's behavior. Surely, a chicken can't look and act like a chicken simply through selection of random variations in the chicken's genetic code. An economy can't operate simply through selection by the marketplace of desired goods and services and their prices. An individual's social and work behaviors can't simply be the result of selection by the situations to which they have been exposed. We intuitively look for a first cause - a creator, economic planner, or character trait to explain why things are as they are.

Karen Pryor describes this confusion with respect to her highly successful application of free operant principles to animal training.

They (traditional animal trainers) seem to find this absence of an initial "command" even more baffling. "How does the animal know what to do?" He doesn't," we say. "He's finding out for himself." It's fundamental societal behavior, but quite different from dominance and submission. This kind of training involves a two-way communication. It's a bargain, a shared endeavor, and a business agreement. (Pryor, 2000).

RULE-GOVERNED VS. CONTINGENCY-SHAPED BEHAVIOR

Skinner described the differences between "rule-governed behaviors" and "contingency-shaped behaviors" (Skinner, 1969).

Rule Governed Behavior

Maintained by sanctions
Contrived
Maintained by culture
Constricted

Contingency-Shaped Behavior

Maintained by natural consequences
Natural
Maintained by universal consequences
Variety and richness

Rule-governed behavior refers to behaviors that are prescribed by formal rules. For example, posted speed limits are rules. We drive within the speed limit on a lonely road because of the rule - not necessarily natural consequences. Conformity to rules is usually enforced through aversive control or sanctions. We are assessed a fine for exceeding the speed limit. It is extremely rare that someone driving within the speed limit is pulled over and given an award.

Contingency-shaped behaviors develop through positive consequences. For example, today I play the piano because I am reinforced by the sounds I produce and listener recognition. However, as a child I hated taking piano lessons because my playing was prescribed by the teacher's rules. If I failed to play in the prescribed way, my piano teacher punished me.

Since rules necessarily dictate behaviors that are not often naturally reinforced, they must be contrived. To remain effective, they must be artificially maintained by the organizational culture and managers. In contrast, natural contingencies do not require contrived interventions to remain effective. The natural consequences of a successful business enterprise are profitability and customer loyalty - to name a few.

The following story was told to me at a quality conference. Years ago, the Emperor of Japan had 99 rules of conduct for his subjects. Failure to conform to any of these rules would result in his Samurai warriors carrying the non-conformist to the center of the town square where his head was cut off with a large

sword. But, what made the subjects especially conformist was that the 99 rules were never published. In such a repressive regime you would not expect much innovation or proactivity.

Though all organizations and, for that matter, all social interactions must have general rules within which people operate, innovation and progress come from variations in how people work within these rules. The British philosopher Gilbert Ryle provides the following anecdote to explain this point.

A scientifically trained spectator, who is not acquainted with chess or any other game, is permitted to look at a chessboard in the intervals between the moves... After a time he begins to notice certain regularities... He commiserates with them (the players) on their bondage. "Every move that you make", he says, "is governed by unbreakable rules; from the moment that one of you puts his hand on the pawn, the move that he will make with it is, in most cases, accurately predictable." Heartless necessity dictates the play, leaving no room in it for intelligence or purpose." ... The players, of course, laugh and explain to him that though every move is governed, not one of them is ordained by the rules. Though nothing happens that is irregular, plenty happens that is surprising, ingenious, or silly. ...The rules are the same for all the games of chess that have ever been played, yet nearly every game that has ever been played has taken a course for which the player can recall no close parallels (Ryle, 1949).

CREATING A FREE OPERANT ORGANIZATION

It is a sad situation that most contemporary animal training relies on positive reinforcement while the management of employees remains centered in aversive control. Why is this? It is because we don't really trust natural consequences as a means of management. We are more comfortable when there is a leader or planner. This is the heart of the debate between those who promote a free market economy versus those who demand government planning and intervention. The traditional way of thinking is that we need to tell people what to do - not count on them to figure it out!

Hundreds of books have been written on how to get employees committed to organizational objectives and long-term success. Many of these prescriptions rely on improved communications (telling people what to do - but better). Employees are provided job descriptions, annual objectives, and mission statements. We tell them what we want, and then we tell them again. This approach rarely gets the results we hope for, and employee behavior usually "drifts" back to behaviors that are comfortable and safe. There are four key ingredients needed to create a free operant workplace.

Personal Consequences. First and foremost, the desired outcomes may be accurately communicated but there is no direct connection between achieving these outcomes and any personal benefits to the individual employee. Again, as Adam Smith put it, "*He generally neither intends to promote the public interest, nor knows how much he is promoting it... He intends only his own gain...*" The secret, then, is to arrange personal consequences for each employee that align with, and drive, the organization's overall objectives.

Focused Performance Measurement. Second, the impact of day-to-day behaviors on strategic and financial organizational results is often ambiguous to the employee. The employee may know what to do, but she may not know why she is doing it. The solution is to develop and track performance measures that align with organizational objectives and are directly influenced by employee behavior.

Positive Leadership. The most difficult free operant transition problem is changing management practices. Manager experience is with direct supervision, strict adherence to, and enforcement of, organizational rules, management by exception, and performance evaluations and pay increases based on personal perceptions rather than measured results. Three methods can assist in the transition: management education, upward feedback from employees concerning management practices, and increasing manager span of control. The greater the span of control, the more difficult it is for the manager to persevere in traditional practices.

Stakeholder pay. To energize employees to pay attention to key results, and to seek out ways to improve these results, the employee must have a stake in both personal and organizational achievements. This means sharing the business risks and rewards with the organization by accepting a less guaranteed wage or salary in exchange for an opportunity to significantly share in organizational profits when performing well. If you want employees to think and act like partners, they must be paid like partners.

BENEFITS OF A FREE OPERANT MANAGEMENT SYSTEM

Adopting the free operant view of management yields many benefits for the organization and its employees. Four benefits are particularly valuable. These are:

- Strategic alignment
- Organizational adaptability
- Employee commitment
- Optimal performance

Strategic Alignment. In a free operant organization, managers determine organizational strategy, organize workflow across departments, and provide employees the resources needed to perform well. However, managers no longer directly supervise employees. Employees are “managed” by the natural consequences of good or poor results as defined by performance measures that align with organizational strategy and profitability. In a stakeholder pay system, good performance provides above-market pay while poor performance results in below-market pay.

Stakeholder pay is, then, similar to self-employment and free enterprise. The customer is the organization and the employee becomes a supplier. The advantages to the organization are consistent alignment of employee performances with strategy and much less need for direct employee supervision. The advantages to the employee are a reduction in aversive control, more empowerment, and a greater personal earnings opportunity.

Organizational Adaptability. Organizational change is usually difficult and slow. Fifty years ago the pace of change for organizations was manageable. Today, however, globalization and rapid changes in technology and the marketplace require successful organizations to be much more nimble and responsive to change than before. However, this capability will not occur if we continue to manage the organization in the same way we did fifty years ago. It is now essential that employees focus on the marketplace and profitability each and every day. They must respond quickly and effectively to change to ensure the success of the organization.

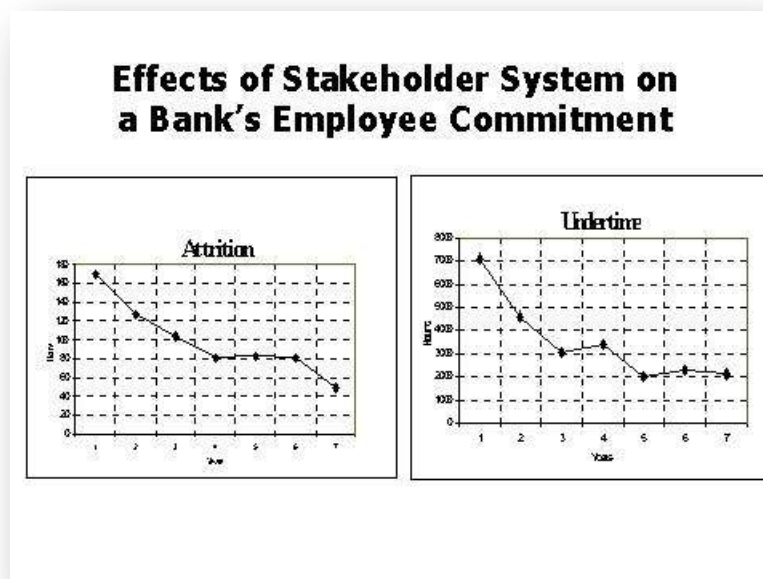
A flexible, responsive, and innovative employee group requires a radical change in organizational management practices. We need to move away from direct supervision, aversive control, entitlement

pay and subjective “performance reviews” toward paying directly for measured results that drive organizational success.

Employee Commitment. Employee commitment is defined operationally as staying with the organization, consistently performing well, and helping outside the assigned job area. Stakeholder pay has been shown to significantly reduce turnover (especially for good performers) and to optimize employee performance. Converting management from subjective, aversive control to objective, positive reinforcement encourages “free operant” behaviors such as job enlargement, cross training and innovation.

Figure 1 depicts the reductions in the number of employees leaving the organization and undertime hours (arrive late, leave early) obtained during the first seven years after implementing the author's performance system (Dierks & McNally, 1987).

Figure 1



Optimal Performance. The new organization can no longer afford mediocre performance. Our experiences with clients finds that simply introducing objective performance measurement and incentive pay (modest payouts in addition to conventional base pay) will yield an average, and sustainable, 33.1% improvement in all types of employee performances. This finding tells us that conventional management practices force compensation expense to be a third more than it should be. Even larger increases in performance are possible if the organization gradually moves away from conventional entitlement pay toward stakeholder pay in which employees directly share business risks and successes.

To optimize and sustain employee performances, management practices must change from traditional supervising to facilitation. The new manager must be knowledgeable and skillful in analyzing performance problems and implementing solutions. The new manager must ensure each stakeholder

employee has the opportunity to perform, the capability and resources, and a supportive job context that minimizes aversive events and maximizes performance feedback and positive reinforcement.

Below are results from a national study as well as research conducted by the author. Figure 2 presents the results of national study that compared results obtained by organizations with conventional pay systems vs. "new pay" (New pay). Figure 3 presents the first year performance gains obtained by twelve companies that implemented the author's Profit-Indexed Performance Pay System (Abernathy & Williams, 2001). Figure 4 presents first year performance gains for the twelve companies for each performance measurement category.

Figure 2



Figure 3



Figure 4

Bottom Line Gains		
Measure Category	Average Gain	P&L Category
Sales	7.0%	Gross Margin \$
Expense	9.0%	Target Expense \$
Productivity	11.7%	Payroll & Benefit \$
Cash Flow	15.6%	Interest Expense \$
Reg Compliance	54.7%	Workman Comp \$
Customer Service	49.6%	Account Attrition \$
Strategic Projects	15.4%	Project Budget \$

The “free operant workplace” is a practical alternative management system to the traditional military hierarchy. The system requires objective performance measurement, stakeholder pay, and a change in management practices. The results of system implementation are dramatic and sustainable improvements over long periods of time. Organizations that adopt this new approach to employee management will also be more flexible and responsive and thus able to compete effectively in the business environment.

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