Flexing the Muscles of Technical

Leadership Technical leaders are a special breed, and they often have distinctive personal leadership styles. But these styles may not be appropriate and effective in every situation. Teaching leaders to alter their styles according to the environment, the people involved and the desired results will help them become better managers, without forcing them to adopt styles that are uncomfortable and unnatural.

By HERMAN BIRNBRAUER and LYNNE A. TYSON

eadership is getting people to do what you want, when you want, the way you want it done...because they want to.

This statement, attributed to President Eisenhower, tells us what leaders do but not how they do it. In fact, most of us can recognize an effective leader, but we have trouble defining how that person achieves his or her goals.

In 1967, we set out to define leadership by locating leaders who were considered successful and ascertaining their major characteristics. Our ultimate goal was to find a way of teaching the skills of leadership to those in supervisory positions.

Focus and range

Our research has focused on technical departments. We have worked with many types and sizes of groups: an engineering department of 100 persons and a maintenance department of 60 persons in manufacturing companies; a matrix project team of 20 persons in the aerospace industry; a technical sales department of 72 persons in a consumer products company; and a computer programming department of 10 persons in a manufacturing company, among others. The sizes of the companies involved in the study ranged from 500 to 30,000 employees.

To begin the study of each group, we took management's word that a person was a particularly good leader. Then we observed, interviewed and studied these individuals. The result was a set of measurements of a leader's effectiveness based on the performance of his or her followers.

We also asked several general questions about every group we studied, including: Is technical leadership different? Are technical workers different? Is there one best leadership style? In a given situation, is there one best style? Can leadership be learned? How can we determine whether a leader is successful? To answer these questions and others, we sought out many types of situations and many kinds of leaders.

Overview of results

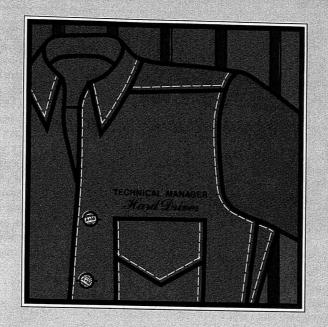
Our studies have shown that there is no one best way to lead and no magic wand for creating leaders. The process of leading is complex, and dramatically different leadership styles can be equally successful.

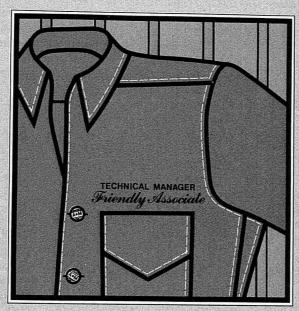
We also have found that there are three basic types of leaders—the hard driver, the friendly associate and the considerate persuader. Although their styles differ, all these leaders share two major characteristics: Over a period of time they create an environment that calls forth high performance from their subordinates; and they flex, or alter, their styles according to their assessments of four crucial factors in a specific work environment. These four factors are the situation, the people, the action taken and the result. We named this combination SPAR.

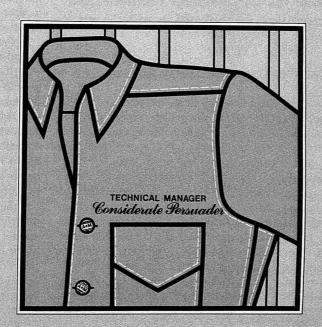
The situation

High-level performers constantly assess the situation. They scan the environment regularly and try to spot patterns, constraints, irregularities, must's, must not's and feasibilities. They base their actions

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on this analysis and on their conception of the results they desire.

Effective leaders are not primarily problem solvers; they are problem preventers. They ask questions to determine the urgency, depth, complexity, consequences, scope and implications of potential problems, and evaluate all options for preventing or solving them. Because many such questions cannot be answered completely for any given situation, they use their abilities to analyze the overall situation and fill in the blanks. The accuracy of effective leaders' analyses is quite high.

In technical leadership, problem situations may involve equipment breakdowns, inadequate or erroneous information, design failures, insufficient time, lack of essential resources, changes in priorities and cost limitations. Ambiguity and complexity often make it difficult to choose the correct leadership style.

But high-performance leaders frequently are able to choose a course of action suited to the situation, even with only limited information. And as situations vary, effective leaders vary their leadership styles.

People

High-level performers are concerned with people. They favor the open, honest approach and place equal value on people to relish. Power seekers perform better when assignments emphasize status, reputation, authority with no accountability and the opportunity to influence others. When assignments involve a great deal of risk, however, a power seeker's performance suffers.

Massey offers an equally useful categorization of employees into traditionalists, challengers and synthesizers.

One goal of our research was to investigate the performance of groups of subordinates with people from each category who were managed by a leader displaying one predominant style of leadership. We used McClelland's and Massey's categorizations to determine the makeup of employee groups. We found that when the leader maintained his or her style, the group's performance was sporadic and depended on the proportion of members who responded well to the leader's style.

A maintenance crew that has been sent to work on a machine shut down for a scheduled overhaul, for example, might consist of electricians, millwrights, pipe fitters, hydraulic mechanics and instrument repair persons. Within each group there probably would be several craft levels, ranging from helper to first class, and groups of achievers, affiliators and power seekers. If the maintenance manager simply imposed his or her style on the group, their performance would depend on how many of the total group

on creating an atmosphere in which all employees can perform to their maximum capacities.

More specifically, we found that, leaders must have paid their dues; they must have earned the right to be leaders. The leader who has not earned the workers' respect will have the greatest difficulty with achievers.

A leader can accomplish more through affiliators when he or she emphasizes teamwork and coordination, rather than setting goals and working alone. With power seekers, a leader should emphasize their skills and status, rather than a risk that might threaten their status.

The results

High-level performers know the results they expect. After they have assessed the situation and people, they determine the results they want—what, when, by whom, where. They identify the discrepancies between what exists and what should be. Then they determine what it will take to accomplish the desired results, and they take action. They set targets that are specific, timely, attainable and realistic. Everyone understands what is expected because the leader takes great pains to communicate this information.

The action

Leaders make things happen. Because of the nature of technical work, hard drivers generally are more successful as technical managers. But if they are to be truly effective, these leaders must learn to alter their styles according to specific situations.

In the case of a critical breakdown, for example, craftspersons who are achievers will respond to a style that allows them to help set goals and claim ownership of the solution to the problem. They will do well when the deadline is critical and authentic, and they want to be held accountable and given corresponding recognition for their achievement. The hard driver leader must allow the employees to participate in solving the problem.

If the situation involves a group of computer programmers with deadlines that are not critical, the leader needs to alter his or her style in another way. Most of the programmers in our study were achievers who responded to the friendly associate. They performed best for a leader who was willing to work along with

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considerations and production goals. In their assessments of situations, then, effective leaders consider the people involved.

David McClelland offers a useful categorization of people as achievement seekers, power seekers and affiliation seekers. Achievers respond to challenges that are interesting, unique and attainable; they do not respond well to dull, repetitive tasks. They also do not perform well when deadlines are unrealistic. Affiliators perform better when teamwork is stressed. They don't always respond well to the type of assignment that achievers seem

responded well to the manager's style. And given the group's diversity in personality and experience, a match between the manager's style and each member's needs would not seem likely.

High-level managers, on the other hand, take the time and expend the effort to learn about their subordinates' interests, aspirations, self-images and expectations. They also assess their subordinates' abilities to perform in different situations and their responsiveness to different leadership styles. They understand themselves and the effect they have on their subordinates, and focus their efforts

Teach perception dramatically.



"The Eve of the Beholder." The film classic that shows how prejudice and emotion can distort perception of people and events. From BNA Communications Inc.

Is Richard Conti a hood? A madman? A murderer? Some of his costars in "The Eye of the Beholder" think so. But then, they see only what they want to see.

It's something we all have to guard against. Which is why this engaging film classic is still in demand as the perfect teaching aid for demonstrating how biases, emotions and snap judgments can play tricks on our eves and cloud our perception. The "Eye' also lends itself to the study of Transactional Analysis, as you see Parent-Adult-Child Ego States emerge from the prejudices and reactions of 5 different people to the character played by Conti.

The film is available in 16mm black and white and also in "mood color" for greater impact.

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them and offer suggestions, support, assistance and encouragement.

If the situation involves a matrix team that is just beginning work on a project, the leadership style that seems to be most successful is that of the considerate persuader. This style is more charismatic. The leader attempts to gain power through credibility, reputation and knowledge, rather than through formal organizational position.

Styles and their effects

After studying several maintenance groups, we compiled some statistics that indicate that the leader's ability to alter or modify his or her style affects subordinates' performances significantly. When leaders were hard drivers who showed little consideration or respect for their employees, response time was slow, and call backs were frequent (40 percent of the jobs required call backs). The time crews took to complete jobs exceeded estimates by 20 percent, and paperwork was only sometimes filled out correctly. The workers frequently performed with what could be called malicious obedience.

To correct this situation, leaders were trained in assessing situations, "reading" employees, setting realistic targets and taking action. They were taught to use SPAR for assessing situations and to flex their styles according to their assessments.

Although the leaders remained predominantly hard drivers, when they learned to show consideration for their workers and to seek power through credibility, the groups' performances showed considerable improvement. Response time improved 20 percent, call backs were reduced to 5 percent, time estimates became accurate to plus or minus 5 percent, and paperwork was completed correctly most of the time.

Thus, even good leaders can improve their subordinates' performance by achieving greater flexibility in their leadership styles. They also can benefit from a conscious effort to maintain certain behaviors and attitudes, regardless of their styles. These behaviors were identified by 25 persons who worked with the leaders we studied and who anonymously completed an assessment instrument. They are listed in the box.

Training leaders

Many trainers would like to find a magic pill that could transform people into good leaders. Our work has proven to us that such a panacea does not exist. Only through diligent, planned effort can leaders recognize and achieve the best use of their own styles.

In technical leadership, there is more than one best way to lead, but all leaders, whatever their styles, can learn to be more effective. Given our current concern for increased productivity and cost containment, and the dramatic improvement in subordinates' performance that can be expected, training and coaching technical leaders to enhance and develop their styles seems worth the effort.

Characteristic Behaviors and Attitudes of Effective Leaders:

Effective technical leaders:

- Make sure everyone knows what is expected.
- Follow rules and procedures consistently but not always strictly. People can "read" them.
- Listen to their followers and demonstrate a desire to understand
- Involve people in decisions that affect them.
- Help people set goals that fit their own value systems.
- Provide help when it is needed.
- Provide timely, specific and usable feedback.
- Put people in a position to be right and then use positive reinforcement. Their praise is appropriate and timely and deals with performance, not personalities.
- Keep everyone informed and close the loop of their communications with "receipts of comprehension."
- Are concerned about the welfare of their employees and display loyalty to their teams.
- Make sure that their employees know how to do their assigned tasks. Training and development is high on their lists of priorities.
- Are sensitive to the feelings of others and can "stand in others' shoes."
- Are competitive in a wholesome way. They keep asking "How do we improve?"
- Have high expectations for task accomplishment and recognize achievement.