

A Technical Course in Supervision Management

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INTRODUCTION

This course is intended for lower level line and program managers who must hire or supervise employees on a regular basis.

Before a new job in a supervisory position is accepted, a person must assess his own preferences and career goals. Even though a management job may mean promotion from a technical position, it might turn out that the new responsibilities don't fit the preferred working style to which a person has grown accustomed. Increased responsibility is not a decision to be made without considerable forethought.

CHAPTER 1

The History of Authority

Since civilization began, there have always been leaders and followers. Usually the leader possessed some attribute which made him more valuable to those around him than all the other people who were available. The leader was probably the strongest in earliest times, then perhaps the progression went smartest, richest, and finally, most popular, as civilization developed. Even in modern times, leaders can be categorized as positional or charismatic.

If twentieth century leadership theory is examined in terms of organizational authority, the works of Chester Barnard are characteristic of what is called the second generation of classic modern management theory. Chester's contributions concern leadership within the formal and informal organization in relation to consent of the governed. In other words, he described the effects of human relations in

the working environment.

Human Relations and Chester Barnard's Contribution

The human relations movement took root in the 1930's and peaked in the early 1950's. Human relationists were a response to a new business image of organizational realities. They recognized that with the increasing shift from individual rural or small business production to large scale, interdependent production by individuals, collective actions due to informal norms in the workplace had significant influence on activities of workers.

Human relationists attempted to develop systems in which the participants would subordinate their interests to those of their work groups in such a way that individual and corporate interests could be integrated. To achieve this integration, they stressed that executives must be skilled in motivating workers in cooperative efforts by emphasizing both moral and technical skills. Previously, only the technical skills had been emphasized by early day businessmen.

Chester Barnard was in a high level position of authority at the time when human relations began to emerge. as an important new subject for business to be concerned about. As president of New Jersey Bell, and as a businessman heavily influenced by the liberal school of thought at Harvard, he was able to systematically analyze the ethical and sociopsychological aspects of management and labor within his own organization. He was able to perceive the relationships between leadership, communication and coordination. Barnard is considered one of the first high level management authorities to stress the communications responsibility of executives, to analyze the role of status in organizations, and to analyze the incentive systems in organizations. His sociological analysis of organizations both encouraged and foreshadowed the post WW II behavioral revolution.

In 1938, Barnard published his often quoted book, "The Functions of the executive". This work is considered the most important work on organizational theory of its decade. The book is also one of the earliest recognitions of the importance and influence of both the formal and the informal organizational structure. It presented the view of the organization as a social system. This view addressed three new concepts divergent from classical theory. A high degree of organizational cooperation was emphasized rather than emphasis on authority and order-giving. Economic factors as human motivators were regulated to secondary roles. Finally, the individual's identification with the organization was attributed to a strong belief in its codes, not based on compliance imposed from without.

Two important excerpts from Barnard's book, "The Source of Authority" and "The System of Coordination", are evaluated in the following paragraphs.

All complex organizations are made up of subunits, and what is recognized as authority at the subunit level is that which is accepted by its members. This holds both at the subunit, and at the larger organizational level.

"Authority is defined as the character of a communication (order) in a formal organization by virtue of which it is accepted by a contributor to or member of the organization as governing the action he contributes".

Barnard says there are two aspects of this definition, the acceptance theory of authority, the subjective and the objective. The subjective refers to personal acceptance of an order as authoritative, while the objective refers to the way in which the order is presented.

The subjective acceptance approach is related to the necessity of assent by the individual. This assent only occurs when four conditions are met at the time of decision.

- 1 . The order is understood.
- 2 . The individual perceives the order as consistent with the purpose of the organization.
- 3 . It's in the individual's best interest to comply.
- 4 . The individual is mentally and physically able to comply.

The first condition involves interpretation; able to interpret the order, it will have no meaning. Until the person is able to interpret the order, it will have no meaning.

The second condition refers to the individual's interpretation of the communication as it relates to his understanding of the purpose of the organization. Barnard felt that organizations were conceived as necessary cooperation among individuals, arising out of the limited capacities and choices of humans. Purpose was the coordinating principle of the organization, with success based on the success in achieving purpose, and efficiency based on the ability to keep individuals contributing. Making or arriving at a purpose is defined in terms of the organization as the attempt to limit the conditions of choice, so that it is practical for the individual to exercise his will within the framework of the organization.

Barnard felt conflicts of orders are the most common example of a failure to meet the condition of interpretation. If the possibility of a conflict with the purposes of the organization is perceived, it is the responsibility of the executive to carefully explain or demonstrate why the appearance of conflict is an illusion.

The third condition relates to net inducements. The decision of an individual to participate in an organization is visualized by Barnard as involving a balance of inducements and contributions. From the organization's viewpoint, the behavior required from an employee involves a balance between participation (membership) and performance. Acceptance theory relates to the individual's motivations to produce.

The fourth condition is obvious: little impossible are still impossible.

Barnard points out that orders a little impossible are still impossible.

In explaining how it is possible to secure cooperation from individuals when the determination of authority lies with the subordinate, Barnard states that the decisions of individuals occur under the following conditions.

- a. deliberately issued orders comply with the four conditions,
- b. there exists a "zone of indifference" in each individual within which orders are acceptable without question, and
- c. the interests of persons who contribute to the organization as a group result in influencing the subject so that a stability in his zone of indifference is maintained.

So far as orders are concerned, Barnard states that, "There is no principle of conduct better established in good organizations than that orders will not be issued that cannot or will not be obeyed." To do so destroys authority, discipline, and morale.

The zone of indifference is the acceptance level of orders. Of all possible orders a person might receive, some will not be obeyed, some will be questioned, and some will be accepted without comment. Those orders accepted without comment fall within the individual's zone of indifference. The greater the individual perceives the value of inducements over contributions required to satisfy the order, the wider his zone of indifference.

Barnard had strong feelings regarding the power of the informal group within the organization. An individual's deepest feelings take place within the bounds of the primary small face-to-face group to which the individual belongs. If the worker feels the interests of the firm clash with those of his primary group, no amount of coercing or propaganda will cause him to develop increased feelings towards the firm. Barnard felt that the informal group was the fundamental source of discipline and social control within the organization. "Thus, the common sense of the community informally arrived at affects the attitude of individuals, and makes them, as individuals, loath to question authority that is with or near the zone of indifference."

In connection with the acceptance of authority, Barnard describes the common sense of the group as the fiction that authority comes down from above. The superior authority is the fiction used to rationalize the acceptance of orders for the good of the organization without incurring a sense of personal subservency. Barnard says most persons will grant authority because they are reluctant to take responsibility for their own actions in the organization.

The System of Coordination

Barnard viewed the organization as a cooperative system where the function of the executives was to maintain the dynamic equilibrium between the needs of the organization and the needs of the employees. In essence, the functions of an executive are to formulate and define a purpose, communicate that purpose, and secure the cooperation of individuals to support the purpose. Organizational rationality is intended to achieve and maintain coordination. In this respect, Barnard was able to shift the prevailing technical rationality of his day towards this newer concept of organizational rationality.

In the System of Coordination, the orientation is from the executive's objective view of communications as a means of achieving acceptance of purpose. An executive is not an "authority", and can only exercise authority when acting officially within a definitely organized system. Therefore, since the character of authority lies in its acceptance by members, organization communications are only sent to those who are contributing members.

In describing the recognition of authority in communication from superior positions, Barnard recognized the authority of position and the authority of leadership. The authority of position refers to the advantage of the incumbent, independent of personal ability. Authority of leadership refers to those with superior ability who are natural or respected leaders.

Since the determination of authority remains with the individual, any ineptness displayed by leaders will result in the loss of objective authority. "Thus, authority depends upon a cooperative personal attitude of individuals on the one hand, and the system of communications in the organization on the other." Barnard calls this system of communication the lines of authority, and says it is a primary continuing problem in a formal organization.

There are several controlling factors which affect the character of a communication system.

- (a) The channels of communication (lines of authority) must be definitely established.
- (b) A formal channel of communication must exist for every member of the organization.
- (c) The line of communication must be as short as possible to avoid new interpretations at each stage. Both large and small organizations have about the same levels of communications
- (d) Communications from top to bottom should pass through every stage.
- (e) The person serving as a communication center must be competent.
- (f) The line of communication should not be interrupted during operation of the organization. Provisions for chain of command must be provided for during an absence.
- (g) Communications should be- originating from a position of authority. Identifying the superior position is a method of identifying and -dignifying all connection with the organization, and a way to recognize status.

In conclusion, Barnard advocated the idea that the business corporation could not function well solely on the basis of contractual relations with individual employees. Acceptance of authority by individuals could be coordinated and regulated only by providing a means to reconcile the differences in the interests of employees and organizations. Executives must choose rationally those means perceived as the most likely to lead to their goals, and then accomplish these means through effective official communications.

The following list outlines some of the main highlights of Barnard's

- A. The nature of authority existing in a simple organization unit is also in all complex organizations.
 - 1. All complex organizations consist of aggregations of subunit organizations.
 - 2. The essentials of authority in elementary and simple organizations should be the same for larger organizations.

- B. Authority is not a right, but the character of a communication by is accepted by a member. It is the definition of two aspects, a subjective aspect and an objective aspect.

- C. The subjective aspect of authority is the personal aspect, the acceptance of a communication as authoritative.
 - 1. A person will accept an order as authoritative only when four conditions are met.
 - a. The communication is understood, until an order is understood it has no meaning.
 - b. At the time of the decision, the receiver believes that it is consistent with the purpose of the organization, and is defined as the attempt to limit the conditions of choice so that it is practical for the individual to exercise his will.
 - c. At the time of the decision, the receiver believes that it is compatible with his or her personal interests; acceptance involves a positive balance between inducements and required contributions.
 - d. The receiver is both mentally and physically able to comply with the order, a little impossible is still impossible.
 - 2. There exists a zone of indifference in each individual within which orders are acceptable without conscious questioning of their authority. The greater the individual perceives the value of inducements over contributions required, the wider his zone of indifference.
 - a. Superior authority, the fiction used to rationalize the acceptance of orders without incurring a sense of personal subservieny.

- D. The function of the executive is to formulate and define a purpose, communicate that purpose, and secure the cooperation of individuals to support the purpose. The executive is primarily occupied with the objective characteristics of communication. The objective characteristic of a communication of authority is that aspect which induces acceptance.
 - 1. The character of authority in organizational communications lies in the potentiality of assent of those to whom they are sent, executives are able to exercise authority only when they are acting officially.
 - 2. The system of communication is a primary continuing problem of a formal organization, lines of authority.
 - 3. There are controlling factors in the character of the communication system as a system of objective authority.

The Organization Structure

Modern organizational structures are the result of evolution by trial and error in the nineteenth and twentieth century. Today, there are basically two types of management systems: the meehanistic and the organic.

The mechanistic system is most appropriate for a stable environment. An example is a rayon manufacturer with a simple product line who fills very predictable orders. The company is run on the basis of clearly defined roles, specialized tasks, limited information flowing downward, and the concentration of decision-making authority at the upper management levels.

An organic system is needed in an environment with much uncertainty. An example of this type is a newly created electronics-development organization. In this company, to adjust to rapid changes in technology and market situations, job tasks are not defined precisely, and specific job requirements are made on an individual basis between superiors, peers, and subordinates. Structure in the organic system is based on expertise in handling current problems. There is just enough structure to prevent confusion and chaos, but the hierarchy is quite loose.

Below is a chart that summarizes the difference between mechanistic and organic organizations:

Mechanistic	Characteristics	Organic
Highly specialized job tasks	Specialization	Low specialization of job tasks
In a select group at top of the system	Locus of authority	At whatever level skill or competence exists
By superior	Conflict resolution	By interaction
Direction and orders	Basis of communication information	Advice, counsel
To the organizational system	Loyalty	To project and group
Based on position in system	Prestige	Based on personal competence
Stable	Environment	Dynamic, unstable

Organization efficiency goes down when there's a mismatch between management style and environmental demands.

What is Supervision Theory

As mentioned in the preface, Supervision Management is the integration of management theory with leadership theory. What then is management theory? Management theory is basically a collection of techniques which have developed since the industrial revolution, intended to enhance productivity in the work environment. The systems approach is generally considered to be the basis of modern management theory.

Why is supervision management needed? In order to increase efficiency and achieve overall corporate objectives, some concerted and consistent directed effort must be applied by supervisors to • their working personnel on a continuous basis. The effectiveness of a supervisor in achieving his or her objectives in a measure of the success of the management style employed.

Common-Sense Basics

Managing people may sound simple, but time and energy is needed to put principles into practice. There are 10 principles used by good managers to get the most out of their people. Although the principles are based on common sense, it takes effort to make them part of the supervisor's personality. The principles:

1. Hire good people.
2. Set clear standards.
3. Train your new employees.
4. Establish a supervisory structure.
5. Promote from within if the "right" people are available.
6. Keep people busy, but minimize "busy" work.
7. Motivate, acknowledge and reward.
8. Separate praise from correction.
9. Listen.
10. Counsel out nonperformers.

The principles all stem from one basic idea: "Treat people as people." To do this, you must first be comfortable with yourself, and have confidence in your own abilities.

The Functions of a Good Manager

The functions of an effective manager can be boiled down to four key ingredients. They are:

1. Support behavior that enhances someone else's feelings of personal worth and importance (self-image maintenance or building; helping people to have positive feelings about themselves),
2. Interaction facilitation behavior that encourages members of the work group to develop close, mutually satisfying relationships.
- 3... Goal emphasis on behavior that stimulates enthusiasm for meeting the group's goals or achieving excellent performance.
4. Work facilitation behavior that helps the organization to achieve its goals. This includes such activities as scheduling, coordination, planning and provision of such resources as tools, materials, and technical knowledge. With these functions in mind, the role of the entry-level supervisor can now be examined.

Visibility - The Art of Taking Control

The first task of a new supervisor, regardless of whether he was promoted from within or hired from outside the organization, is to firmly establish himself or herself in the new position. Visibility, both upward and downward, plays a key role in this effort.

Upward visibility involves making your presence known in a positive way to the highest level of management in your organization. An effective way of accomplishing this is to provide or produce something that requires an extra effort outside the normal activities of the job you have been selected for. Publishing a paper, presenting an in-house seminar describing your field of expertise, speaking at a symposium, saving the company money, or finding a new potential source of business are excellent means of gaining immediate high level visibility. Even if you don't have excellent writing or speaking skills, unless you do something outstanding, the effort you perform is always judged much higher by others than the actual event you produce.

If one of the instant visibility methods does not appeal to you, simply doing a very good job provides excellent upward visibility; it just takes a little longer. Remember, a good job makes your supervisor look good, and so on up the chain. It won't take long, even in a big organization, for people at the top to know exactly who you are.

Downward visibility must be established immediately for effective control to be accomplished. If you are promoted from within, prior co-workers will be very interested to see if you "have what it takes". People who haven't worked with you also want to know about the "new supervisor". Techniques such as calling a staff meeting to describe your goals or taking your group out to lunch are non-hostile and extremely effective in establishing your presence as the new supervisor.

Outside hires are even more interesting to subordinates, but from a slightly different perspective. Generally speaking, a new

supervisor from outside will have to overcome a certain amount of anxiety from his subordinates, both immediate and lower level.

Call a meeting to introduce yourself, then explain your background, expertise, and goals or objectives. After the meeting, meet with each immediate lower-level subordinate individually, asking each what they expect, and what they would like to see for the organization. It is also very important to have a private meeting to find out the likes and dislikes of your secretary. Good relations with the office staff will provide visibility throughout the organization faster than any other means available. This is often termed the "grapevine" approach.

Supervisor Assets

A. One of the supervisor's most significant assets is a strong, accurate self-concept.

„ 1. Self-Awareness ,

A supervisor must always remember he is a part-time manager and full-time human being. Therefore, the narrower the supervisor's view of himself or herself, the harder it is to fit an employee in. A very broad self understanding is most desirable.

2. Self-Acceptance

Physical attributes: body characteristics such as height, weight, age, etc,

Emotional attributes: feelings you possess such as shy, happy, cynical, cheerful, etc.

Mental attributes: intellectual characteristics such as intelligent, clever, dumb, smart, etc.

Roles: functions you fulfill such as job, marital status, parental status, activities, etc.

Relationships with others: stance you take in dealing with other people, such as open, closed, withdrawn, accessible, etc.

3, Self-Esteem

Self-esteem relates to how one pictures his own worth or value in relation to others,

Self Evaluation Quiz

The following self-evaluation quiz is to identify your own strengths and weaknesses related to nine essential keys to achieving business success. Score one for each yes answer.

Do you have:

- A high level of drive and energy?
- Enough self-confidence to take carefully calculated, moderate risks?
- A clear idea of money as a way of keeping score? As a means of generating more money still?
- The ability to get other people to work with you and for you in a productive way?
- High but realistic, achievable goals?
- Belief that you can control you own destiny?
- Readiness to learn from your own mistakes and failures?
- A long-term vision of the future of your business?

If you have six of the nine possible attributes, that's a higher score than the great majority of business executives who have taken this quiz. Unless you score eight out of nine you fall short of your success potential,

An Effective Supervisor Must be Able to Make Transitions: Taking Hold and Letting Go

Supervision is a profession in itself. Therefore, certain values and ways of thinking require redirection.

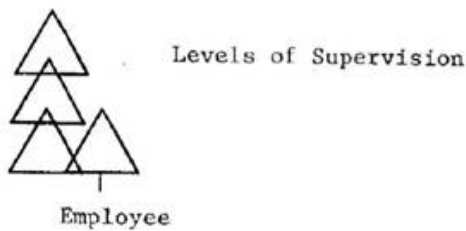
A. Understanding the occupational change. This transition represents a shift from technical direction towards personnel direction. Working supervisors are usually at the entry-level position where the person both works on the job and manages others doing related work.

B. The Push Me - Pull You Reality

Push	Pulled
New responsibilities	Old responsibilities
New relationships	Old relationships
New uncertainties	Old successes
New pressures	Old skills
New time guidelines	Old environment
New social climate	

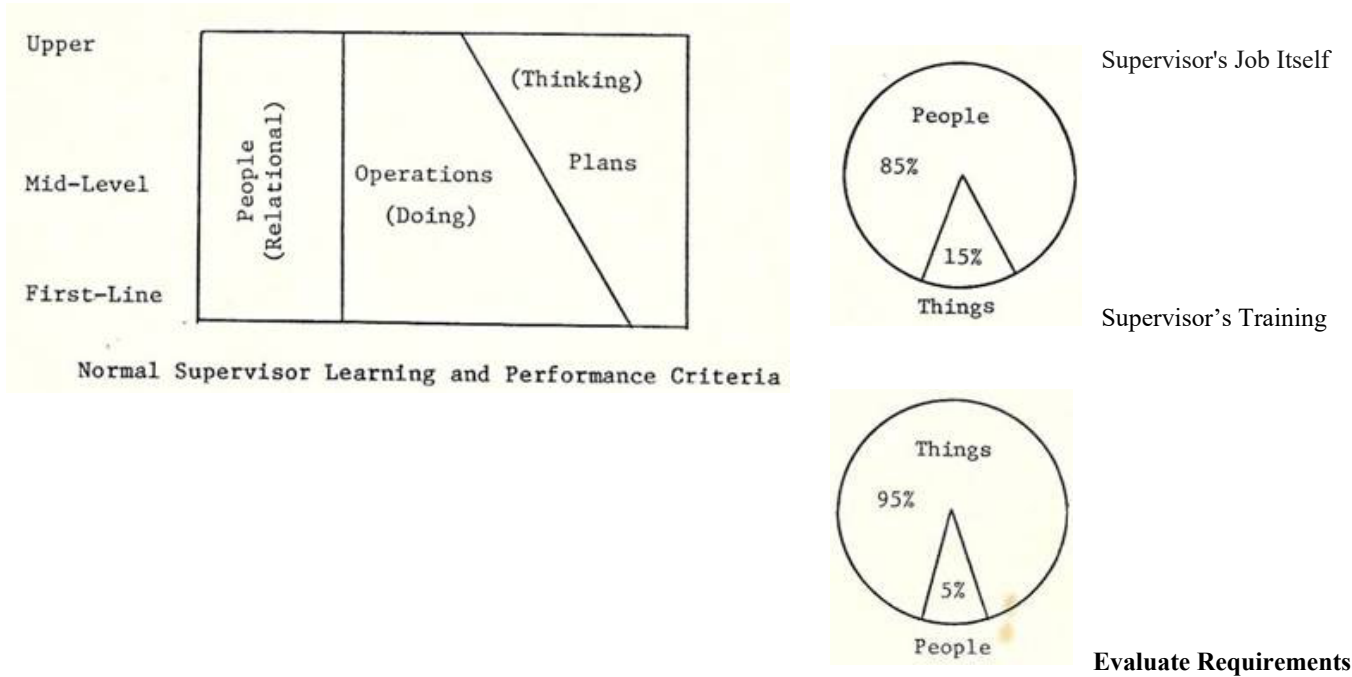
C. The "Linking" Process

To an employee, the "company" is thought of in terms of their immediate first-level line supervisor. Each level is linked as shown below:



D. The New Skills Mix

New skills in people management must be developed for each new level of supervision. Eight out of ten reasons supervisors fail is due to their inability to adjust their relationships with people.



to Put the Skills to Work

1. When a promotion results in supervision over a friend, you can remain friends or practice non-fraternization; broken friendships are not good for a business environment.
 - a. Acknowledge discomfort
Tell your friend of your discomfort.
 - b. Admit uncertainty
Tell your friend of your uncertainty. You can make a personal contract with your friend that your company will not affect outside relationships.
 - c. Bosses pet problems
c. Be honest with the rest of the employees and make them promise to let you know if they ever perceive a favoritism problem with someone else.
 - d. Sitting duck fears
Don't worry about employee setting you up for a fall in order to get your job. Concentrate on training your successor instead.
 - e. Obligations vs. feelings
A supervisor's first obligation is to insure corporate objectives are met. The first personal obligation is to establish humanistic credibility which will insure employees have the same corporate objectives.

2. Supervising older/more experienced people

a. Experience vs. academics

Experience is needed more than background training. A supervisor must learn that he needs to say, "I don't know" and "Show me".

b. Non-compete agreement

The supervisor is responsible for insuring that competition between older and younger engineers does not get out of hand.

c. Involvement in decision-making

Although sometimes difficult, younger employees should always be involved in decision making to prevent disharmony.

d. Ask Them to Teach

Ask both experienced and new employees to teach you what they can about their work. Experienced people should learn to teach both younger employees and supervisors. The supervisor doesn't need to know the jobs everyone does, he only needs to know whether or not they do it well.

e. Expect them to learn

Don't ever give experienced people a license to not learn what is new.

When teaching people their jobs, tell them what you hope the training will accomplish. They'll achieve those goals easier.

3. The Manager as a Teacher

- When grooming a subordinate for advancement the following guidelines have proven successful as characteristics of managers-as-teachers,
- They counseled. 'They gave younger managers constructive advice ' and feedback. They used younger managers as sounding boards.
- They excelled. Whether in finance, engineering, production, marketing, or a particular manager was the best in some aspect of the business before their promotion.
- They gave exposure. They made sure that the work and accomplishments of young managers were seen. They opened doors for them.
- They provided latitude. They gave young managers the freedom to "try., the courage to fail. They involved them in important tasks.
- They were tough taskmasters. They challenged; they demanded excellence.

4. Supervising younger/less experienced people

- You can hire good ones

Take some time and prepare when interviewing.

- Be sure to expect enough

Insist on new or younger people learning their job.

- Insist on immediate job ownership

Make subordinates learn by not taking the new person off their job to quickly even if they aren't contributing.

5. Watch out for upward delegation

- a. Don't do a job yourself rather than letting less experienced employees learn.
- b. Acknowledge "special risks"

Let higher level management know when lower level employees are having problems.

6. Steering clear of the traps

- a. The "set-up"

Sometimes the employee will ask a question they know you can't answer but they can. They may be saying "do you know how much I know". The best response is, "I don't know, why are you asking?"

- b. The "put down"

A supervisor should never allow emotions to get in the way of business relationships. When things go badly, try harder.

- c. Jealousy
- d. Resentment
- e. Competition

Always remember a supervisor is responsible to his organization and employees. A supervisor is not responsible for the behavior of

his employees. There is a big difference between feelings and behavior.

Feelings

Allow them to have any and all they need to have. much about this but care about them.

Behavior

Encourage only that which you are willing to accept. Take responsibility for your own behavior only. Your job is to make it easy for employees to perform but not make them perform.

Case Study: Narrowing the Experience'- Gap in a Technical

With technology changing so fast that even the most dedicated engineers have trouble pacing it. The knowledge gap between senior engineers and recent graduates is more pronounced in the electronics industry than in any other. This experiential gap between junior and senior staff members often leads to interpersonal conflicts that hinder progress. Recognizing and negotiating these conflicts are just regular examples of the "little joys" of being an engineering manager.

People delineate themselves into relative levels of experience, skill, and seniority. How employees perceive their own positions and the position of others in the experiential hierarchy may not coincide with the view of their manager. Conflicts arising from this lack of perceptual agreement can be devastating to the organization. Not only are difficulties that arise from these conflicts difficult to diagnose, but they are similarly difficult to repair.

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A Typical Problem:

Frank Barnes is a senior design engineer in a MOS memory house that specializes in EPROM's and ROM's. He's been with the company six years and is 35 years old. Frank has tried to keep pace with the changes in his field, and has been successful until the last few years. As his kids grow older, Frank spends more and more time on what he considers the higher priorities of his family life. Frank feels that his worth to the company accumulates over time, so he doesn't strive as hard as he once did to prove himself.

Several months ago a large corporation bought Frank's company and immediately began an intensive capitalization program. New equipment was installed in design automation and manufacturing to enhance product introductions. The wafer fabrication department began implementing processes to reduce feature geometry and improve product performance. Along with these changes came many new faces in the design staff. Since the labor market had tightened increasingly for circuit-design talent, the new engineers hired were very young.

Laura Wollock is one of these new engineers. With four years of experience since graduate school, she has accumulated a good deal of knowledge in advanced design techniques and theories. Laura is paired with Frank on a project to develop an EPROM that will put the company one year ahead of the competition.

In the two months that Frank and Laura worked together, hostility brewed. The design manager, Lu Chow, also a new addition with the acquisition, noticed the tension and began to investigate. After individual discussions with both Frank and Laura, Lu could conclude nothing. Both of them gave specific task-related explanations of their difficulties in designing the memory chip, and both said nothing about having any problem with the other. Lu was reluctant to press the issue.

A couple of months passed and the abrasiveness between Laura and Frank became more intense. Finally Frank called Lu and made an appointment to discuss the matter. "I don't know how to work with her," Frank said, obviously agitated. "She's curt, insulting, and sneers at everything I try to tell her. When I suggest a method of analyzing the circuit or modeling its performance, she spends ten minutes telling me why it won't work. She just won't listen. I've tried to be diplomatic, but I've no more patience. I need your help."

Lu explained to Frank that he would think about it. The next day Lu got a call from Laura asking for a meeting.

"Lu, I'm tired of it. Ever since I got here Frank's been trying to be my boss. I understood us to be a design team, but he won't try anything new and he insists on using the old simulation software." Laura paced as she spoke. "At this rate, we'll miss our target date by six months."

Lu Chow tapped the desk and told Laura that he would think about it.

Here were two professionals complaining about each other, expressing frustration and dismay at each other's behavior. "There must be more to the story," thought Lu. And he was right. Frank didn't tell Lu that he knew what Laura's salary was. The fact that only 15% separated them was a real source of frustration for Frank. Laura was holding some cards as well. She didn't tell Lu that Frank had been treating her like a niece. A lot more of the problem lay under the surface, bubbling up as a series of small irritations.

Lu was in a difficult spot, too. His bonus was riding on his group's ability to introduce four new products by year's end, and his mortgage balloon payment was riding on his bonus.

The story above is an over simplification. The types of scenarios that actually occur will be as varied and complex as humans can be. The key issue, however, is that without the systematic dependence of junior staff upon senior staff as a normal professional pattern, there is nothing to stand in the way of the potential conflicts that stem from territorial insults. To effectively manage a staff, the manager must be aware of some types of human behavior that generally apply to conflicts like these in the business arena:

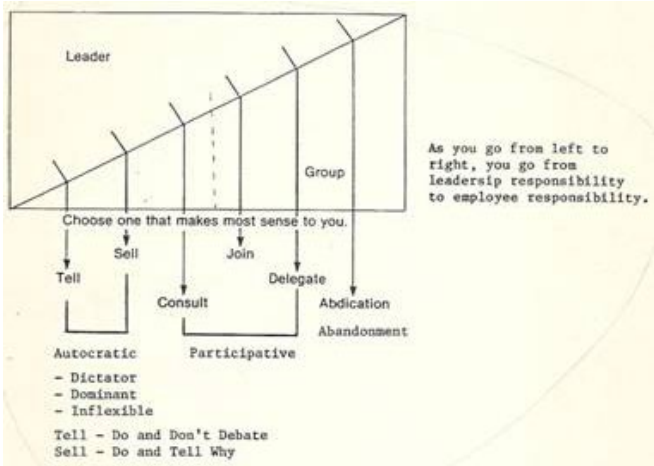
- People are competitive and territorial. They strive to achieve and defend boundaries. Borders can be as physical as office space or as vague as areas of expertise.
- People compete more as they perceive change within or near their boundaries. "In good times, they don't want to be left behind; in bad times, they don't want to be left out. During periods of stability, people still compete, but to a lesser degree.

- Senior staff members think that younger people owe them respect because they are moving into "their" territory, residing' within' the boundaries of their knowledge.
- Junior staff members may feel that experience is of value only as it is immediately and apparently applicable.
- Rapid technological change can devalue technical experience, both in a relative sense as it is viewed by fellow employees, and in a business sense as it contributes to company goals.
- Interpersonal skills borne from .experience are devalued as well, because people tend to discredit sources of information rather than each piece of data on its own merit.
- Many people avoid confronting one another with conflicts. The antagonism is usually expressed indirectly through more damaging ways such as poison-pen memos, or refusing assistance, for example. When a person is confronted with an interpersonal conflict, the usual response is denial of the problem or any responsibility for it.
- Not all territorial battles stem from the experience gap. Those that do, however, can be handled in a fairly straightforward manner. First, recognize that the principles of behavior outlined above may indeed operate in your organization. Be acutely aware of these dynamics and how they might color the work environment. Second, don't attempt to change the way people feel. Reason is impotent in dealing with these largely emotional matters. If a manager confronts an employee with, "I understand that you must feel threatened," the employee will deny it and walk away feeling threatened even more.
- If there is enough data to indicate that experience gap issues exist, the next step is to set about advertising what the characteristics of the industry are and how they affect everyone's lives. During a staff meeting, devote a portion to describing the conditions in a high-technology business that contributes to interpersonal difficulties. Be sure to do so without making any statements that could be viewed as casting blame on a specific individual or individuals. A good lead-in might sound like this:

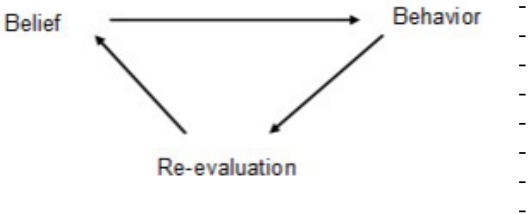
"As you're all aware, our department has been undergoing a lot of changes. Our whole industry is in the same boat. Competition for sales, patents, products, and people is getting stiffer. It might help us all in our efforts to succeed if we build into our plans some of the factors that affect our work environment."
- The last step is to consider incorporating staff ideas or conflict resolution into the collective plan in order to address the existing problems. It may be a good idea to ask the employees how they could avoid rubbing each other the wrong way. They might have notions on how staff training could best be implemented, or some other ideas. Active participation when trying to implement constructive measures will increase the chances that the organization itself will minimize the impact of the experience gap.

The Supervisor Must Make Some Conscious Choices About Leadership Style

A. Leadership Styles Related To: Job Ownership, Job Responsibility, Job Involvement



- 4. "Warm-fuzzy" system
Primary concern is to make everyone happy
- 5. "Warm-fuzzy" system
Primary concern is to make everyone happy
- 6. Free Spirit
Isolated by preference. Participation more important than finish
- 7. Team player
Recognizes and respects differences of others What Comes First, Belief or Behavior?

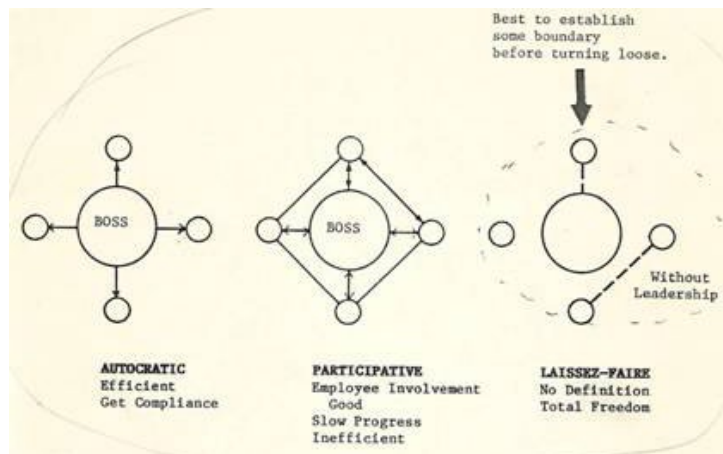


Good Supervisors are Good Planners. Knowing When and How are Critical Issues

- A. How the supervisors expectation effects planning and achievement
- B.
 - 1. Verbal and non-verbal messages establish expectation through four separate functions:
 - a. Climate - you establish with employee – eye contact, facial expression, tone of voice, body posture.
 - b. Feedback - amount and quality of performance information

- c. Input - teaching - here's what I wanted, here's the difference, how about trying it again, concentrate on performance, no what you didn't like.
- d. Output - participation

The Leaders Personality May Strongly Influence Basic Leadership Style



B. It's essential that the manager have a clear picture of his or her own values or convictions. However, the leadership style used must be flexible and designed for each employee individually.

5% 1. Duty-bound system

Tribalistic - Don't question leadership

5% 2. Survival of the "fiercest" system

Mercenary - Get to top any way possible

20-30% 3. Rule-bound system:

Everything justified

30-35% 4. "Winner takes all" system.

Competitor - won't compete unless the prize is worth the effort

Tactics

Organizational and political politics are very similar. Being aware of employee and competitive tactics when using office politics will effectively deflate their usefulness. The following tactics are listed in order of the percentage of time used.

1. Attacking or blaming others - such as making the rival look bad in the eyes of influential organization members. As the saying goes, "When something goes wrong, the first thing to be fixed is the blame."
2. Use of information such as with-holding or distorting information or using it to overwhelm another person.
3. Image building/impression, management includes general appearance, dress, and hair style, drawing attention to successes and giving the appearance of being on the inside of important activities.
4. Support-building for ideas - including getting others to understand one's ideas for a decision before the meeting is called.
5. Praising others, ingratiation - expressions such as "buttering up" "apple polishing," and other more colorful, but less printable.
6. Power coalitions - strong allies getting key people on your side.
7. Association with influential people - both business and social situations are considered important.
8. Creating obligations/reciprocity - the norm of reciprocity is invoked when assistance is required, "You scratch my back and I'll scratch yours."

Watch out for these tactics in your organization. When judgments are made, they often overshadow genuine competence.

Messages

The effective supervisor makes sure that verbal and non-verbal messages about expectation are consistent. He or she assures that each employee knows:

1. The organizational "game plan"
What are we trying to do? All employees should know this.
2. Individual key responsibility
What level of performance do your employees consider as adequate to meet their responsibilities.
3. Individual performance goals

You notice your own faults in others easier than in yourself. Be careful not to become over critical.

Supervision Reviews

If supervisors, conducting supervision interviews, want employees to feel comfortable, should they ask direct questions, or should primarily follow-up directions suggested by the employee?

Several studies have shown that certain verbal behaviors by supervisors were directly related to trainees' satisfaction or dissatisfaction with the interviews. For example, trainees were uncomfortable when supervisors asked them a question after they had just asked a question, made defensive and critical comments, or made direct requests for information or opinions.

Trainees felt comfortable when their spontaneous expressions of ideas or suggestions were followed by the supervisor asking them to elaborate or to give more opinions. The research



suggests that trainees may have felt "put on the spot" by very direct requests for information from their supervisor, but felt encouraged that they had interested the supervisor when they were asked to elaborate on ideas.

As a suggestion to improve employee satisfaction in supervision interviews, take the time to let the employee spontaneously offer ideas. Then follow up on those ideas. This may pay off by improving your relationships with employees as well as in increased worker satisfaction.

Evaluation Criteria

Performance evaluations usually look at three primary areas of work activity.

1. Consistency: Has the subordinate performed just as well (or as poorly) on this task as they have on previous occasions?
2. Distinctiveness: Does he/she also perform well (or poorly) on other tasks?
3. Consensus: Is he/she performing at a higher (or lower) level on this task than are other subordinates?

When employees are given direct specific feedback related to their job performance, either positive or negative, it becomes much more effective and useful to the employee.

People will value even unpleasant feedback if they are told specifically how it was derived and how it compares to other rating of their own and others' work. Never use nonspecific feedback.

Give Credit When Due

Just as the misbehaving child often gets the most attention, it is easy to let problem employees, or those whose performance is suffering, become your focus. When one of these poor performers finally completes an assignment satisfactorily, you give out lavish praise, hoping the troublemaker is finally on the right track.

At the same time you are attending to the problem employee, you may be taking for granted the employees who are consistently doing good work, and you may be assuming they know you appreciate them. Unfortunately, they may not know, and they may be feeling unappreciated.

Human relations consultants suggest that you keep a list of the people who work for you. Note specific accomplishments of each, and keep track of the number of times you compliment each of them. Don't just hand out general approving comments like, "Good job." Tell them specifically what you appreciate about their work. Make sure the deserving employees are getting their share of the credit for work well done.

Remember, praise costs little to give out and reaps big benefits in terms of employee satisfaction and performance. However, a supervisor must

Also remember that people usually react to praise with some discomfort, uneasiness, and defensiveness. They often deny the compliment or put themselves down:

- "I really can't take credit for it."
- "Well, its nothing really."
- They squirm, look away, and become flushed. The discomfort is caused by evaluation. Unless we trust the praiser, we may suspect that person's motives ("What does he want from me?"). We also expect the other shoe to fall (a negative item to follow the positive one) as in the "sandwich technique." That's a criticism hidden between two slices of praise.

A supervisor should describe rather than praising it. ("There report." vs. "What a great report!") specifically what the employee has done, are a lot of useful examples in that They'll accept it better and it will be more meaningful to them.

The Proper Way to Praise

A Why some supervisors don't

1. That's what I pay them
2. They'll just want more money.
3. You can always respond to a request by saying I can't but will look into it.
4. I don't need it, why should they.
5. I don't have time.
6. It won't last.

C. Some common-mistakes

1. Too general

2. Too late - tell employee when it occurs.
3. Too public - praise in private.
4. Too formal
5. Too phony

D. -How to make it meaningful

1. Make it timely'.

One week is a maximum time to wait. Let them know you know its review time.

2. Make it behavioral Actions equal results
3. Make it personal

I and you instead of us.

4. Make it private

Public praise destroys worth. Only make praise public if it is a rare occurrence.

5. Make it memorable -'

So it can be repeated. If you ignore behavior (good or bad) all the time it will disappear.

1. Make it believable

I can really see me or my work. Praise messages should include:

First the event, then the effect, then your feelings

Feeling should relate how you felt about the event they did and what were its effects - start sentence with "I feel you did.

The Correct Way to Correct

Don't say "good but". Be direct and say what needs correcting.

A: The "constructive criticism" myth .. not good to use a distructive technique - a supervisor should not feel that it does more to give than receive.

B. The trouble with "you"

When you say the word "you" and then change or correct it, it generates defensiveness, and results in feelings of liable, blame, punishment or threat. It will create a personal second-level attack and will cause the employee to be defensive and justify his or her actions.

C. Coaching and caring

Replaces constructive criticism

1. The four-part coaching

Messages: Event - Effect - Feeling - Responses Wanted

- a. The Event= The Problem Who, What, When, Where, How

- 1) Who
- 2) What
- 3) When
- 4) Where
- 5) Why
- 6) How

- b. The Effect - Negotiation Impact

If the only thing you have to talk about with an employee is attitude, then don't talk.

1. quantity
2. quality
3. time
4. cost
5. space/location
6. people

b. Feelings - Internal Emotional Reaction

1) clarity

Make common statements

2) ownership

Use the word "I" more than "We"

3) control

Experience vs. outlet for frustration Pause between stimulus and responses

c. Responses - Changes

Inquire - carefully

1) Inquire

2) Request whenever possible

3) Declare

Establish a future pattern

4) Direct immediate responses

Don't assassinate character Watch out for negative inferences

The Successful Supervisor Understands His or Her Role in the Discipline Process

A. Discipline is literally a form of training and growth

1. Its foundation is cooperation, knowledge, and mutual understanding
2. It is not destructive
3. It preserves individual freedom and dignity
4. It is more preventive than punishing
5. It is both social and individual

B. Effective discipline systems have some important characteristics

1. Supervisors work at creating a constructive climate
 - a. People grow toward strength
 - b. Weakness may not be significant
2. Employee rules are established with great care
 - a. Few and simple
 - b. Monitor critical behavior
3. The basic requirement is that each employee knows: Does the employee know, can I verify that they know?
 - a. Responsibilities
 - b. Standards
 - c. Current success level
 - d. Needed changes
 - e. Sources of help

C. Accurate documentation is a necessity

1. Each administration is recorded
 - a. Objective behavior
 - b. Specific deficiency
 - c. Specific changes needed
 - d. Encouragement and assistance
 - e. Results of non-compliance
 - f. Employee endorsement
2. Files have a precise lifetime

D. How to know when its time to make some changes. Employees don't perform because they decide not to; they don't now how,

or the environment prohibits them from doing so.

1. You must know exactly what results are expected.
2. You must know what results are being accomplished.
3. You must know the difference between 1 and 2.
4. Must know why the difference occurs. If the employee doesn't know what is expected, it's the supervisors responsibility to inform him.
5. Must be willing to assist the employee in deciding whether or not to change their behavior or performance.

Terminating

The most distasteful of a manager's tasks can be conveying bad news, especially when warning or terminating someone.

Six guidelines are given below to aid both manager and employee through rough times.

1. Deliver the bad news as soon as it becomes a certainty. This increases the receiver's chance of doing something constructive about it.
2. Emphasize your authority over the recipient. The greater the power differential, the more likely the recipient will give credence to the threat.
3. Be precise when delivering bad news. The receiver must understand that his life will in some way change.
4. Accurately identify the person responsible for the decision, don't shift the blame.
5. Provide alternatives to meet frustrated needs. Discuss severance pay, unemployment income, etc.
6. Identify resources that may be useful to the recipient in adapting to the new situation.

As a suggestion; when delivering bad news, refer to this list and level with the employee.

Thinking Twice Before You Fire

Perhaps the most famous and effective performance appraisal of all time was addressed by God to the corrupt, idolatrous King Belshazzar. Written on Belshazzar's palace by a disembodied hand was: "You have been weighed in the balance and found wanting" (Daniel 5:27). The poor rating so upset Belshazzar that "he turned pale, he became limp in every limb, and his knees knocked together." He was terminated shortly thereafter.

We mortals are more fallible. Therefore, before you rush the decision to terminate a person's employment, you should ask yourself the following questions:

1. Did I give ample warning? You are not being fair with the individual unless, in performance reviews, you have given constructive criticism on how to improve his or her work or mend his or her ways. If the person fails to improve, then you have an honest basis for sterner measures.
2. Do I have a qualified replacement ready to step into the vacancy? You must be certain that the change will bring about a significant improvement. At least the potential for improvement must exist.
3. Is the primary responsibility for failure the employee's or mine? Did you pick the right person for the job? Did the person receive the necessary training and supervision? Perhaps all the person needs is a new manager, not a new employer. Since supervisors are evaluated based on their performance as managers, be sure to prepare an employee and your organization, and think twice about the reasons, prior to deciding on termination. Also, don't do anything without discussing the situation with your direct supervisor.

Improving Results Through Work Planning

A. Definition - Work planning is identifying a series of actions aimed at achieving an intended result.

B. Key components

1. Responsibility - areas of required behavior performance; administrative, operational, relational
2. Authority - power to decide in the required behavior/performance area
3. Accountability - specific results which need to be accomplished in assigned area.
4. Acceptance - freedom or latitude to do what's expected

C. The basic work plan

Responsibility/Attribute

80% of the real value of an employee's job comes from 20% of his work.

How to Respond to the "Inherited- Problem

RESPONSIBILITY	GOAL	(Required Performance Area) (What Needs To Be Done)	
	MEASURE	(How Well Completed - Specific Result)	
ACCOUNTABILITY	STEPS	How to make it happen	SCHEDULE : COMPLIANCE
		Procedure Sequence Required Regulations Coordination Reporting	Date or Time : Occurred Date/Time
	REMARKS	How well was it accomplished	

Responsibility	Attribute
verbs	accuracy
(assigned	cooperativeness
behavior)	friendliness

deficiencies.

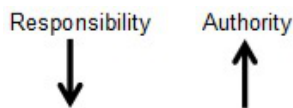
4. Define actual results.

5. Identify authority to apply consequences. (no power prevents accomplishment)

6. Develop an action plan to correct the improper behavior based on all information accumulated.

Delegation

Successful supervisors understand the necessity of delegation. This is required of supervisors and considered a shared management obligation.



A. Definition - delegation is the shifting of responsibility for an action to a subordinate.

B. Why we don't delegate - supervisors often feel they will loose control while in reality delegation expands control

C. What you can delegate

1. Anything they can do acceptably
2. Anything they can do instead of you
3. Anything they can do at less expense
4. Anything they can do more timely than you
5. Anything that will add to their and your development

D. What you can't delegate

1. Ultimate accountability for results
2. Ultimate accountability for your own behavior

E. Key dimensions

For Delegation to be complete Responsibility

Authority

Accountability

Acceptance of Freedoms

Worker

A. Must know what he does now and what his job is supposed to be.

B. Will need to know authority you have to make a decision affecting the employee.

Note: Be very careful when accepting responsibility to shape someone up or handle an existing performance problem.

STEPS REQUIRED

1. Define required results.
2. Define the job.
3. Identify specific performance

COMMUNICATION AND LISTENING

Communication Laws

The following six laws emphasize that hear, not what we intend for them to hear. Communication breakdowns are common, and must be repaired for work to proceed smoothly.

1. Communication usually fails - except by chance. Anticipate trouble than be overconfident. (It's better to anticipate trouble than be overconfident.)
2. If a message can be understood in different ways, it will be taken in the way that does the most harm. (Misprints and misunderstandings seem to oppose your goal.)
3. There is always somebody who knows better than you what you meant by your message. (Readers-between-the-lines abound.)
4. The more communication there is, the more difficult it is for communication to succeed. (We're already overloaded with words and information.)
5. In mass communication, it is not important how things are, the important thing is how things seem to be. (Media events overshadow reality.)
6. The importance of a news item is inversely correlated with the square of distance. (Trivial gossip about local people is more important to people than events affecting millions in lands across the globe.)

The supervisor's listening style must convey a general interest in, and concern for, people. Try to find out how your communication style is viewed by others. When you see yourself as being persuasive, someone else may see you as pushy.

A. Listening is largely a matter of habit; some good, some bad.

BAD LISTENERS

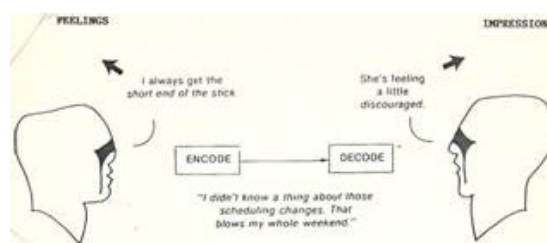
1. "Tune out" the other person at the beginning - they prejudge --wit-hout giving the speakeer a chance
2. Are quick to criticize grammar and/or speaking skill.. Their attention ""is directed to form
3. Spend the time when they should be fully listening, getting ready to talk when the speaker finishes
4. Tend to listen mainly for facts - they expend their energy trying to memorize - a grade school habit
5. Try to outline or take in everything - try to remember everything, misdirect their attention to .perfection
6. Fake attention - sometimes it's an unconscious habit. When they find active listening is really hard work, they try to avoid the work by faking.
7. Create distractions - try to do something else while listening, apparently believing hearing is listening
8. Give up too soon when they have to actively work at understanding when listening
9. Tend to get distracted by emotional words; they don't control .their attention.or emotional priorities consciously; sometimes lose their temper
10. Are not aware of the talking/ listening "speed limits" mismatch - they waist thought power and get lost in tangential thinking

GOOD LISTENERS

1. Defer their judgment - more 'controlled - listen for the other person to say something-
2. Pay most attention to content - do not allow grammar or speaking skill to supersede the substance of the message
3. Listen completely first - then plan their own response
4. Have become more mature in their listening habits - they listen for the main idea - the principle(s) being presented
5. Separate facts from principles - concentrate on remembering principles. They don't worry about committing all information to memory
6. Work at keeping attentive - they are aware of their human tendency to fake
7. Do one thing at a time - they realize listening is a full-time job - they give thei.r f.full attention to listening
8. Have confidence that they will be able to understand if they only listen carfully and ask questions
9. They feel their honest anger, but control it - do not allow their emotional reactions to govern their behavior - their intellect is more ":in charge"
10. Keep their mental energies on the subject by practicing listening techniques

B. Most messages people send are mere clues to real intent. General Rule - Never respond to the first thing you hear - will usually respond wrong

1. Some typical non-verbal cues:
 - a. Irritability.
 - b. Sarcasm
 - c. Unusually talkative
 - d. Unusually quiet
 - e. Depressed posture
 - f. Frowning
 - g. Absent-mindedness
 2. The verbal cues are often more noticeable.
 - a. "I'm really mad."
 - b. "I should have taken off today.":
 - c. "Just forget it."
 - d. "What am I supposed to be, perfect?"
 - e. "Take this job and shove it."
 - f. "I can't stand her (him)."
 - g. "Get off my back, will you?"
 3. Extra-verbal clues add a third dimension.
 - a. Sighs
 - b. Gasps
 - c. Grunts
 - d. Groans
- C. Complete communication occurs only when what we understand is what the other person meant.



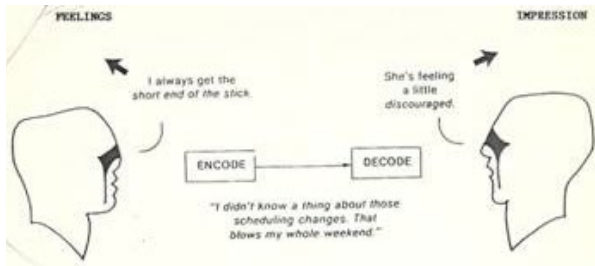
1. It isn't always this simple.
 - a. People don't always say what they feel
 - b. People don't always know how they feel
 - c. It is hard to verbalize feelings
 - d. Words have many meanings
 - e. We hear only what we want to hear
 2. The way the supervisor responds determines the length and depth of the conversation. LISTENING RESPONSE - Worst: Evaluation - Judgmental Interpretive - Real Supportive - Patronizing Probing – Questions (What did you Learn?)

80% of the time the supervision uses one of the following responses:

 - a. Evaluative
 - b. Interpretive
 - c. Supportive
 - d. Probing
 - e. Understanding
- D. The effective supervisor learns to respond with understanding.
1. The understanding response says:
 - a. "I hear what you're feeling"

- b. "I'm interested and concerned"
- c. "I understand where you are"
- d. "I'd like to be of help"
- e. "I'm interested in how you feel"
- f. "I'll take the time to listen"
- g. "You're important"

2. Listening with understanding enables the supervisor to give genuine feedback.



3. Understanding requires a special attitude:
- a. Genuine desire to help
 - b. Willingness to take the time
 - c. Unconditional acceptance

CHAPTER III

Motivation

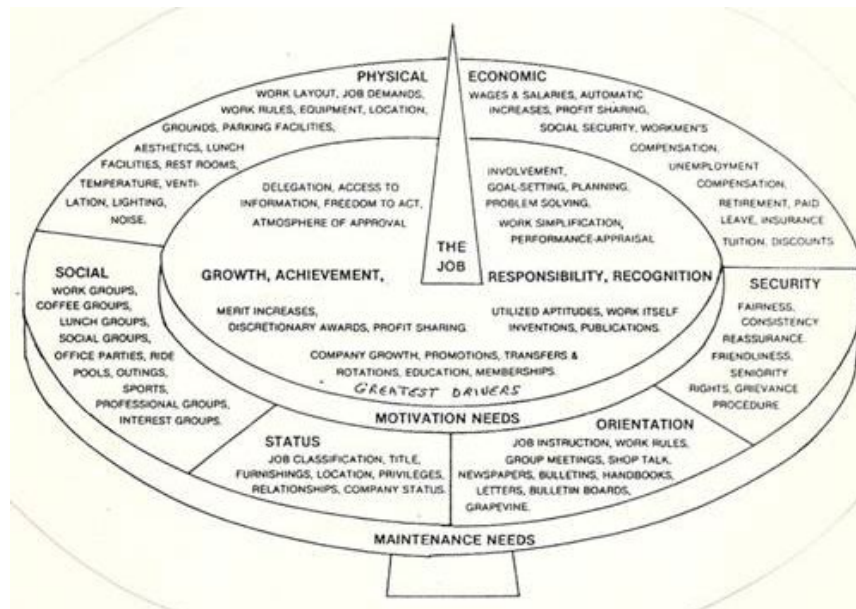
A. Abraham Maslow - "Father of Humanistic Psychology". Motivation - wants to and will do well

Theory of Motivation "To be motivated, one must have an opportunity to satisfy his or her particular needs."

- 1. Every person has NEEDS
- 2. A person's external behavior is a mirror of internal NEEDS
- 3. A person's NEEDS are built one on top of another-(Hierarchy). Satisfied NEEDS lead to complacency
- 4. A person can be motivated at the lowest level of current, unmet NEEDS. Unmet NEEDS motivate.
- 5. A satisfied NEED will no longer motivate

B. Frederick Herzberg - Two-factor theory (motivation/maintenance)

- 1. Basic Philosophy - Company goals can best be served by providing opportunity for employees to achieve their personal goals
- 2. Basic Question - Think of a time when you felt exceptionally good or exceptionally bad about your job, present or past, long-range, or short-range, and tell-me which in both cases.
 - a. "Motivation Seekers", greatest satisfaction and strongest motivators are challenging job feelings of achievement, earned recognition, opportunity for personal growth (inner directed). The majority are turned on by these.
 - b. "Maintenance Seekers" - motivated primarily by the nature of their environment - pay, benefits, supervision, status, job security, company policy, and fellow employees. Most people not turned on by these.
 - c. A Motivational Map



CHAPTER IV

Project Engineering and Project Management

Leadership in potentially dangerous situations is most effective when risk-taking is modeled by the person in charge. People will follow where you dare to tread.

What Does a PM Do?

The project manager has the task of controlling and integrating corporate resources in the most efficient and cost effective manner available in order to meet the required short-term corporate goals. To accomplish this corporate task, the project manager applies a systems management approach by using functional personnel to support specific programs in a horizontal management structure. To be successful, project managers need functional personnel who can efficiently support two management structures. These employees must be able to report vertically to their line manager while simultaneously reporting horizontally to one or more project managers.

Interrelationships of project managers and line managers must be carefully controlled. Working relationships with line managers should be close and on a daily basis. The line manager is considered the technical authority who loans technical resources to the project manager for the purpose of accomplishing the project manager's objectives. Each manager equally contributes to corporate profits.

The project manager usually needs only a general knowledge of the technology involved in his programs to be successful. His strong points must be strong communicative and interpersonal skills, plus a good understanding of the operations of each line organization. Effectiveness requires an understanding of not only organizational behavior and structure, but also the quantitative tools and techniques needed. In this regard, project management is intended as management by shared authority and responsibility between line and project management, with planning, controlling, and monitoring of a specific project the responsibility of the project manager. Functional management is responsible for performing the work.

Regarding the evolution of project management, as the size and complexity of activities developed to the point where they became more unmanageable in existing traditional structures, the need for a more effective means of accomplishing one-time tasks with the minimum disruption of routine business was the driving force behind the development of the project management approach.

The imperatives driving the need for project management included length of the project, capital and time commitment, technology specialization, organizational complexity, and increased need for effective control. Once the need for project management in an organization is established, and after the decision is made for its implementation, it still often takes two to three years to convert from a traditional structure.

Project driven organizations are characterized by separate projects, each with its own cost center and profit and loss statement. This type of organization is typical in the aerospace and construction industry, and is most efficient with an organic type organizational structure. Since the chain of command should be used, for approving projects, not planning them, the most effective means of project management requires that the program manager must have adequate organizational status to perform his job. This means a position reporting both high and low in the organization depending on a particular project's life cycle. Additionally, to avoid conflicts, project manager's salaries should be at about the same level as a line manager.

Systems Theory and Concepts

The concept of project management developed from systems theory. General systems theory is described as a "management approach

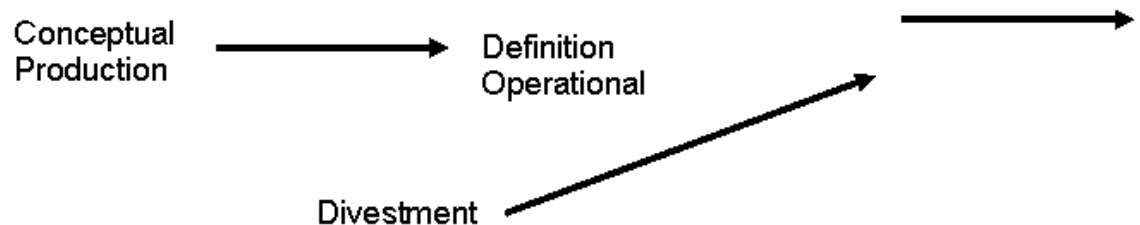
that attempts to integrate and unify scientific information across many fields of knowledge. It is an overall problem-solution approach rather than a specific component approach. In this manner, organizations using a systems approach tend to develop as groups of interrelated functional activities operating towards common goals. The technique that cuts across many organizational disciplines while still allowing for traditional management functions is called system, project, or matrix management.

Since the biggest problem facing modern business systems is the necessity to respond to a rapidly changing environment, a structure evolved that provides the most efficient application of systems theory. Project management developed to adequately address the dynamic needs of business.

Systems are characterized by their boundaries or interface conditions. Closed systems are completely isolated from the environmental system with management having complete control over all system components. Open systems are effected by the environment, and have a permeable boundary. Extended systems are changing systems which significantly depend on other systems.

Basic differences exist between product and project management activities in addition to where each is located in the organizational structure. Basically, project managers attempt to complete their project within a certain defined time while product managers are more interested in extending their product's life. Often a project manager evolves into a product manager in the later phases of a project's life cycle.

The life cycle phases of products are fairly well understood and agreed to by industry, while project life cycle phases vary widely as to interpretation. The project phases are normally listed as:



Program Organizational Structures

Several factors led to the need for and development of, program management within the traditional organizational structure. Factors causing the need for organizational change include technology advances, competition, costs, and unpredictable consumer demands. Current appropriate organizational structures are formed as a compromise between the traditional and the involved, the product or service selected, and the owner's management philosophy. However, regardless of the final organizational form selected, authority, responsibility, and accountability will still dictate the formation of clear channels in order for work to proceed.

There are advantages and disadvantages to the various project organizational forms. The major disadvantage with the pure project form is the cost of maintaining the organization. The duplication of effort by support personnel involved on different projects is expensive and inefficient. The inefficiency causes technology to suffer in the pure form of organizational structure.

Matrix organizational form evolved as an attempt to combine the advantages of the pure functional structure with the product organizational structure. The project manager has total responsibility and accountability for project success in a typical matrix structure, with authority often granted directly by the general manager. In a true matrix structure, decision making and direction rests with the project team with the project manager serving as a coordinator. The project manager acts as a unifying agent for project control of resources and technology. Therefore, the advantages of matrix structure eliminate almost all of the disadvantages of the traditional structure.

Assuming a matrix type structure is advantageous to an organization, the organization's size will influence the actual form of the matrix structure that evolves. In general, for small companies with a minimum number of projects, an arrangement where the program manager reports directly to the general manager often works best. For larger organizations, the use of a manager of project managers (MPM) to reduce the number of people that report directly to the general manager is the preferred form. Also, it was pointed out that many small and medium size companies have been very successful in managing internal projects using departmental project management.

Concerning team structure, certain case requirements are necessary for a team to get moving.

Team Building (From the Managers Viewpoint)

A manager must take many things into account before he can bring a new employee on board. Not only must the candidate be capable technically, but he also must get along with the other engineers on the team. The team as a whole must work synergistically, so that the whole will generate more than the sum of the parts ever could.

When hiring somebody for a team, should the manager look for somebody who has specific experience in the function they'll have to carry out in that team, or should they look for a more general kind of creativity, an ability to adapt to new situations?

Managers probably should look for a mix of both. In one case, you're looking for expertise in an aspect of a project that may be rather specialized. In that case, you should hone in more on what that person has to offer, especially if it's a rare kind of expertise.

But from a team viewpoint, you're looking for a balance. And that balance depends on whether you're forming a team which already has other people on board for just that project or if you're hiring for the long term, in which case you'd look for the kind of curiosity that people have about learning an area that's new. Hopefully, you can find someone who is not afraid to make a mistake, but also

someone who will not repeat the same mistake over.

Concerning team structure, certain case requirements are necessary for a team to get moving. In building a team, one of the things to look for is an anchorman. The one, key, central champion that's going to make it live, or die by it. A truly motivated person who's going to wake up in the middle of the night if he just dreamed that his project was going to get delayed.

The organization chart for a team is usually structured around the central champion and a few key people. These people form the foundation of an effective team. It's then up to the manager to find where the strengths are, and support the weaknesses. The manager can then cover the people as well as possible to take care of the things that the key people are not going to take care of.

In selecting a team manager, certain characteristics are desirable. A good manager for either engineering people or technical support has to be a person who is balanced in terms of management traits. He has to know that he must measure the work of the people under him, and that he must, first of all, separate himself from competing against his people on a technical basis. It's not his business. The first-line management job is very difficult because it generally is supported by someone who comes up from the ranks; it's usually people who used to do the technical, vocational work themselves.

Staying in Touch With a Team.

While putting together a winning team is difficult, it's not the last battle. Problems can develop weeks, months, or even years down the road. A good manager doesn't stop working on the team as a whole after the staffing has been done. Rather, he responds continuously to the team's needs. First he must learn what those needs are. The following methods are recommended for staying in contact with a team.

The best approach is by not looking over their shoulders. Going around the team meetings to chat with key members for a few minutes over coffee is a good tactic to use. You can find out whether the team is together or not, whether they are talking to each other, whether they are a team or whether they're just a bunch of individual contributors being tied together.

It's hard also, to cover issues in a formal review once or twice a year. The only way to really get to the bottom of a situation informally, one to one, is by reading in-between the lines, talking with people, looking for those signs that say this person is happy and contributing, or that there's dissonance somewhere inside or there's something buried inside.

You've got to have regular meetings at the group level. Also, if you're aware, you can pick up things even though they're not being said by the actions people have, by contact.

You also have to know each of your people as an individual and have enough one-to-one contact with them and work with each of them in such a way that they have trust in you. They know that you don't expect them to be perfect or whatever, so they'll come to you when there are problems.

Meetings.

A. Group Decisions -Without the Group.

When you want to get a large group of people who work far apart to pool their ideas about an issue of common concern, try the Delphi Technique.

The Delphi Technique begins with a questionnaire sent to each group member on which the key issues to be decided are raised and the receiver's responses are requested.

After the forms are returned, the responses are compiled and sent out to the membership again, this time asking them to comment upon the points made in the first set of responses.

This cycle of questionnaires is repeated, several times group's views and preferences are narrowed down.

Finally, in a last round of questionnaires, each member is asked to vote on the issues. The aggregation of individual votes determines the group's choice.

Thus, a decision is deliberated and decided without the time and cost needed to bring a group together.

B. The Memorandum Approach

To save managerial time and increase company productivity, encourage the frequent use of the memorandum approach. Even if the issues do eventually require a meeting, the discussion will be more efficient because of this advance preparation.

1. Prepare a memo outlining the issue and proposing a solution.
2. Circulate the memo to all parties directly involved and concerned with making a decision on the issue.
3. Ask recipients to indicate agreement, modifying the solution, or make an alternative proposal.
4. Use their feedback to redraft the original memo.
5. Circulate the revised memo for concurrence or comment.

C. Effective Time Management

There are several techniques that project managers can practice in order to make better use of their time. Not all of these techniques are recommended.

- Delegate
- Follow the schedule

- Decide fast
- Decide who should attend
- Learn to say no
- Start now
- Do the tough part first
- Travel light
- Work at travel stops
- Avoid useless memos
- Refuse to do the unimportant
- Look ahead
- Ask: Is this trip necessary?
- Know your energy cycle
- Control telephone time
- Send out the meeting agenda
- Shut off in-house visits
- Overcome procrastination
- Manage by exception

The project manager, to be effective, must establish time management rules and then ask himself four questions.

Rules for Time Management

- Conduct a time analysis (time log)
- Plan solid blocks for important things
- Classify your activities
- Establish priorities
- Establish opportunity cost on activities
- Train your system (boss, subordinate, peers)
- Practice delegation
- Practice calculated. neglect
- Practice management by exception
- Focus on opportunities - not on problems

Questions.

- What am I doing that I don't have to be doing at all?
- What am I doing that can be done better by someone else?
- What am I doing that could be done sufficiently well by someone else?
- Am I establishing the right priorities for my activities?

The following recommendations are provided by Harold Kerzner in his book, "Project Management".

- Know the weekly and daily energy cycle of your people as well as your own. Be sure to assign or perform work that is compatible with this energy cycle.
- If you have employees who come and go on flex-time schedules, be sure to account for this arrangement in assigning work and understanding their energy cycle.
- Understand the productivity level of your people and make sure that the project's performance standards are compatible with the productivity level of your people.
- Do not schedule overtime unnecessarily unless you know that overtime is needed and that efficiency will be maintained, It is possible for employees to "save themselves for overtime" and thereby produce the same work in twelve hours that they would in eight hours.
- ○ Try to monitor your own work load closely to see if there is any work that does not have to be done effectively by someone else. If necessary, refuse the unimportant work. Avoid procrastination and try to work on the most difficult tasks first. Start now and look for ways to buy additional time. Be prepared to make quick decisions. —

- Do not schedule meetings unless they are cost effective and necessary. Assist your people in preparation for the meeting. Prepare an agenda and make sure that key personnel are informed well in advance of any major problems to be discussed.
- Conduct the meeting effectively and efficiently. Start the meeting on time, get right to the point, and end the meeting on time. Try to get all attendees to express their views, and avoid prolonged discussions of trivial tasks.
- Decide whether or not it is absolutely necessary for you to attend a given meeting; especially if it requires travel time. If travel time is required, be prepared to work at travel stops.
- Try to minimize the amount of time you spend away from your desk. Be willing to delegate. Plan solid blocks of time for important work. Classify your objectives, and get to the point at once. Learn how to say no. Be willing to delegate and employ the management-by-exception concept.
- Time robbers can destroy a good project schedule. Control telephone time and be willing to let your secretary take messages. Get rid of casual visitors. If necessary, find a way to work in seclusion.
- Establish proper priorities for yourself, your project, and your people.
- Avoid time-consuming communication processes. Avoid unnecessary memos. If memos or letters are necessary, make them short and summary type in nature. If you have lengthy reports to read, it is best to take them with you on long trips.
- Train your boss, peers, and subordinates on how to work with you. Be willing to assert your rights.
- Follow your schedules closely, especially items on the critical path. You may find it necessary to monitor critical items yourself rather than wait for periodic feedback.
- Be willing to delegate work to subordinates and peers. Do not try to be a "nice guy" and do it all yourself, lest you place yourself in the position of doing work that is normally the responsibility of the functional departments or other project office personnel.

Project managers typically understand well the role of the project manager at project conception, but seem to forget it during project execution. This loss of understanding, which creates time management problems for the project manager, is usually caused by the project manager:

- Waiting for someone else to make a decision that is his own responsibility.
- Neglecting to "keep his door open" and "walk the halls" to find out what's going on.
- Being concerned about his previous technical discipline or profession rather than the best interest of the company.
- Being too interested in methods rather than in results.
- Trying to do the work himself rather than to delegate it to someone working slower.
- Wasting time in project team meetings discussing one-on-one problems.
- Failing to recognize that his boss is there to help.

Project managers must understand that even though they have the authority, responsibility, and accountability for a project, there are still parent company administrative duties that must be accepted. These items are usually additional work that the project manager has not considered.

Project management may not be the best system for managing resources, but it is better than anything we have had in the past. Effective time management may very well be the most important weapon in the project manager's arsenal for obtaining proper resource control.

Preventing Line and Staff Problems

Line managers often disdain what staff specialists suggest. Usually, line managers want immediate, easy-to-use solutions for their day-to-day problems. Staff specialists (such as personnel managers, safety officers, legal experts) often take a long-range approach that may create problems today as it provides solutions for the future.

To promote collaboration between line and staff managers, set up the following criteria:

1. Line managers must realize that staff specialists are there to assist (not obstruct) them in getting things done.
2. Staff managers must realize that their job is to recommend and advise, not to give orders. They must "sell, not tell." The line manager should be the final judge of what actually will work.
3. Line managers should keep staff people informed about their plans and problems.
4. Staff specialists should work out all the details of a program before recommending it, so that line managers know explicitly what is being proposed and what their own roles will be before they are asked to approve or disapprove the program.

Job Satisfaction

A QUICK JOB SATISFACTION QUIZ

Curious about how satisfied your employees are relative to people who work elsewhere? Below is a five-item quiz you can give them

and a way to compare their scores to others.

SCALE:

1. Strongly dissatisfied
2. Dissatisfied
3. Neutral or no opinion
4. Satisfied
5. Strongly Satisfied

RESPONSE

1. How satisfied are you with the nature of the work you perform?
2. How satisfied are you with the person who supervises you?
3. How satisfied are you with your relations with others in this organization with whom you work?
4. How satisfied are you with the pay you receive for you job?
5. How satisfied are you with the opportunities that exist in this organization for advancement?

SCORING THE TEST

An average score for each of the five questions should be calculated by adding up the total scores for that item and dividing that sum by the number of people who responded. Carry this average to two or three decimal places. The lower the average figure, the more dissatisfied you people are. Some typical average figures for different levels of employees are shown as follows.

	<u>Middle Managers</u>	<u>Supervisors</u>	<u>Clerks</u>
Work satisfaction	3.69	3.41	2.97
Supervision satisfaction	3.58	3.15	2.97
Co-workers' satisfaction	3.80	3.23	3.26
Pay satisfaction	2.90	2.71	2.58
Promotion satisfaction	2.64	2.46	2.20
Total satisfaction	16.61	14.96	13.98

An average response below 2.50 indicates a distinct problem area.

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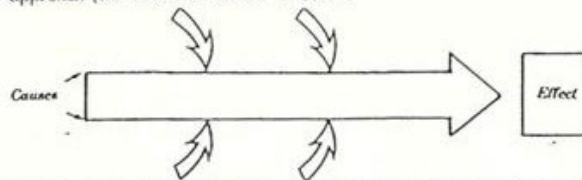
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B.C. Gabrielson, Theories of Authority; An Interpretation of Barnard, Marymount College of Virginia, Management Seminar, November 7, 1985

L.E. Boone and D.D. Bowen, The Great Writings in Management and Organizational Behavior, MacMillan Publishing, New York, 1984.

Fishbone Approach to Problem Analysis

A useful method for identifying, organizing and diagramming the causes of a business problem is called the "fishbone" approach (the result looks like a fish skeleton). It is most handy when analyzing a complex problem in a group. The basic format is summarized below:

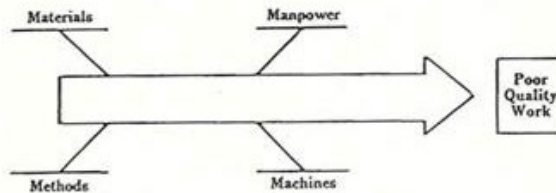


The problem is the effect and is written in the box to the right. The possible causes for the problem are written in the area to the left.

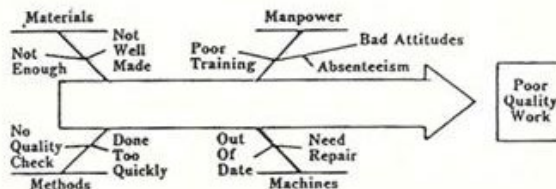
The fishbone procedure involves five steps.

1) State the problem as precisely as possible and write it in the box.

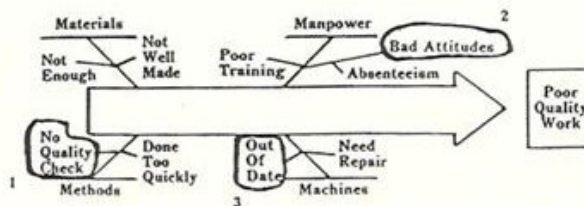
2) List major groupings for possible causes to the left. See example below:



3) Brainstorm specific reasons. Add them to the diagram as depicted below.



4) Identify and rank the most likely causes (perhaps by asking other people what they think). Circle the reasons most worth investigating and then give them a priority assignment, as in the diagram below:



5) Recommend a solution to be implemented.

to lead a group of colleagues through a problem-solving discussion, use the fishbone approach of recording your analysis.

Suggestion: The next time you want