CHAPTER TWO

Making Sound and Creative Decisions

Learning objectives

After studying this chapter, you will be able to:

1. Discuss the importance of recognition and timeliness in decision making.
2. Differentiate between programmed and nonprogrammed decisions.
3. State the steps followed in the scientific method of decision making.
4. Name several potential advantages and disadvantages of group decision making.
5. List several traps that supervisors frequently fall into when making decisions.
6. Discuss the role that the supervisor plays in establishing a creative environment.
7. Describe several group-oriented techniques that can be employed by supervisors to encourage creativity.
8. Itemize some of the more frequently encountered barriers to organizational creativity.
Since the first day that Jane Harris accepted the supervisor’s job, she has been concerned about the many tough decisions she has had to make. Just this morning, for example, Jerry Krzyzanowski, one of her employees, requested a change in the vacation schedule. Jerry had received a last-minute invitation to go on a Canadian hunting trip as his uncle’s guest. Jerry considered this “the chance of a lifetime.” The problem is that three other members of the department have already been approved for vacation during the same week that Jerry requested. Even with Jerry on hand, the department would be operating with a skeleton crew.

Jane has also been concerned about her apparent inability to come up with, and implement, new ideas. It seems to Jane that most of her employees are perfectly happy to do things the way they have been done for years. Last week, when she asked Jerry Krzyzanowski if he had considered reviewing the procedures for filing completed claims, Jerry replied, “Why change? It’s worked well up to now.”

Among the primary factors that distinguish supervisors from operative employees are the level and types of decisions that they must make. A supervisor must be concerned with how a decision might affect his or her employees and the organization. An operative employee, in contrast, is primarily concerned with how a decision affects him or her individually. People who don’t like making decisions usually do not make good supervisors.

In fact, a supervisor’s skill in making decisions is often a key factor in the kind of evaluation and rewards (promotion, money, assignments, etc.) that he or she receives. Moreover, a supervisor’s decision-making ability will ultimately contribute to the success or failure of the organization.

Figure 2.1 gives some examples of both expected and unexpected decisions that a supervisor might face. Although the supervisor generally has more time to deal with expected decisions than with unexpected decisions, this does not necessarily mean that expected decisions are easier to make or less critical. For example, a supervisor’s recommendation to hire or not to hire a job applicant could have serious ramifications for a long time to come.

New technology has made information much more readily available to all levels of management, including supervisors. The proliferation of computers, the Internet, and intranets have all affected the information available to supervisors. However, the availability of information has not necessarily made decision making any easier or less important for supervisors.

### FIGURE 2.1
Examples of Expected and Unexpected Decisions

<table>
<thead>
<tr>
<th>Expected (Anticipated) Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Recommendation concerning the hiring of a new job applicant.</td>
</tr>
<tr>
<td>2. Salary and promotion recommendations.</td>
</tr>
<tr>
<td>3. Approval of vacation requests.</td>
</tr>
<tr>
<td>4. Assignment of a new piece of equipment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unexpected (Unanticipated) Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An employee requests next Friday off to attend a Shriners’ convention.</td>
</tr>
<tr>
<td>2. An employee who doesn’t seem to get along with others in the department requests a transfer.</td>
</tr>
<tr>
<td>3. A piece of major equipment is malfunctioning but still operable—should it be shut down until it is repaired?</td>
</tr>
<tr>
<td>4. An employee expresses fear of a new machine and refuses to work on it.</td>
</tr>
<tr>
<td>5. Three employees call in sick today. What adjustments must be made to meet production schedules?</td>
</tr>
</tbody>
</table>
The terms decision making and problem solving are often confused and therefore need to be clarified. **Decision making**, in its narrowest sense, is the process of choosing from among various alternatives. A problem is any deviation from some standard or desired level of performance. **Problem solving**, then, is the process of determining the appropriate responses or actions necessary to alleviate a problem. Problem solving necessarily involves decision making, since all problems can be attacked in numerous ways and the problem solver must decide which way is best. On the other hand, not all decisions involve problems (such as a supervisor choosing whom to recommend for a promotion). However, from a practical perspective, most supervisory decisions do involve solving or at least avoiding problems.

Decisions are often classified as programmed or nonprogrammed. **Programmed decisions** are reached by an established or systematic procedure. Normally, the decision maker knows the situation in a programmable decision. Routine, repetitive decisions usually fall into this category. Supervisory decisions covered by organizational policies, procedures, and rules are programmed in that established guidelines must be followed in arriving at the decision.

**Nonprogrammed decisions** have little or no precedent. They are relatively unstructured and generally require a more creative approach by the decision maker; the decision maker must develop the procedure to be used. Generally, nonprogrammed decisions are more difficult to make than programmed decisions. Deciding on a new piece of equipment and next year’s goals are examples of nonprogrammed decisions.

Recognizing the need to make a decision is a natural prerequisite to making a sound decision. Timeliness is also critical to a sound decision. Some supervisors always seem to make decisions on the spot, others tend to take forever in deciding even a simple matter, and still others just seem to ignore matters requiring decisions by acting as if the problems don’t exist. The supervisor who takes pride in making quick decisions also runs the risk of making bad decisions. Failure to gather and evaluate available data, to consider employees’ feelings, and to anticipate the impact of the decision can result in a very quick but poor decision. Just as risky, of course, is the other extreme—the supervisor who listens to the problem and promises to get back to the employee but never does. Nearly as bad is the supervisor who gets back to the employee—but only after an inordinate amount of time. There are other familiar types: The supervisor who never seems to have adequate information to make a decision, the supervisor who frets and worries over even the simplest decisions, and the supervisor who refers everything to the boss.

All of the types described above are either overconcerned or underconcerned about making a decision. They show little regard for the timing and quality of the decision. Especially when the situation involves some unpleasant matter (such as whether to fire an employee), it is common for the supervisor to make a quick decision and thus get rid of the problem or to ignore the problem and hope that it will go away. These are natural human reactions. The successful supervisor has learned to resist such reactions and to make decisions with a proper concern for their timeliness.

Knowing when to make a decision is complicated by the fact that different decisions must be made within different time frames. For example, a supervisor would generally...
have much more time in deciding on promotion recommendations than in deciding what
to do when three employees call in sick. Unfortunately, there is no magic formula that
tells a supervisor when a decision should be made or how long it should take. The su-
pervisor has to develop an awareness for the importance of properly timing decisions.

The supervisor should also understand the relationship between properly timing deci-
sions and being decisive. Decisiveness is a necessary characteristic of a good supervisor.
Avoiding a decision or putting off a decision can result in worse circumstances than mak-
ing a questionable but timely decision. However, being decisive does not mean making a
decision in the least amount of time. Being decisive means making a decision in a rea-
sonable amount of time.

Steps in the Decision-Making Process

Once the supervisor has recognized the need to make a decision, there are things that he
or she can do to affect the quality of the decision. Most successful supervisors use some
type of systematic and logical approach to making decisions. The following steps, based
on the scientific method, are recommended for making decisions:

1. Be alert to indications and symptoms of problems.
2. Tentatively define the problem.
3. Collect facts and redefine the problem if necessary.
4. Identify possible alternatives.
5. Gather and organize facts concerning identified alternatives.
6. Evaluate possible alternatives.
7. Choose and implement the best alternative.
8. Follow up.¹

Each step is discussed in the following paragraphs. It should be noted that these steps are
not always sequential. As new facts become available, for example, the decision maker
might be required to loop back to Step 2 or Step 3.

Step 1: Be Alert to Indications and Symptoms of Problems

Being alert to indications and symptoms of problems is an integral part of recognizing
the need to make a decision (which was discussed in the preceding section). All too
often supervisors tend to brush off or ignore indicators and symptoms of problems.
Supervisors should constantly be cognizant of any changes that might indicate a potential
problem.

Frequently, the hardest part of making a decision is defining just what the decision prob-
lem is. It is very difficult for a supervisor to make a sound decision about anything unless
the exact nature of the problem is known. For example, suppose a certain machine operator
is producing an unacceptably high number of rejects. Is the problem due to the machine,
the operator, the raw material, or some other factor? Similarly, an employee complains
about the workplace being too hot. Is the temperature set too high? Does the employee
just prefer a cooler temperature? Is something wrong with the air conditioner? Or is the
employee just a complainer?

Many supervisors find it difficult to distinguish between the symptoms of the problem
and the problem itself. As a result, a supervisor may treat the symptoms and not the prob-
lem. Treating the symptoms is usually a short-term solution at best. For example, suppose
your car has a faulty generator, which in turn causes the battery to run down. If you treat
the symptom and replace the battery, you will have solved the problem only for a very
short time. At this stage, supervisors should do their best to define the problem based on the identified indicators and symptoms.

**Step 3: Collect Facts and Redefine the Problem If Necessary**

After the problem has been tentatively defined, based on the initial indicators and symptoms, a supervisor should then collect pertinent data and facts.

Figure 2.2 presents four factors that, when systematically addressed, can help define most problems. The responses to each of these factors should be recorded in writing to help the supervisor maintain objectivity. Figure 2.3 analyzes the factors of a problem concerning an unacceptable number of rejects. By pinning down and identifying the symptoms, the location, the time, and the extent of the problem, the supervisor can usually get a much better grasp of what the problem really is. If a supervisor finds that he or she has several problems, then the problems should be prioritized and addressed in order.

**Step 4: Identify Possible Alternatives**

Once the problem has been clearly defined, possible alternatives can be identified. Obviously, any decision is only as good as the best of the alternatives that are considered. One common pitfall in identifying possible alternatives is considering only obvious alternatives or alternatives that have been used previously. With such an approach, many viable alternatives may not even be considered. As a general rule, the more alternatives generated, the better the final solution. There is a tendency among many supervisors to stop looking for alternatives once they have identified one or two that seem acceptable. A good rule of thumb is to try to generate at least four alternatives.

Asking for the opinions of others who may know something about the problem can be helpful in generating alternatives. The supervisor may become so involved in a particular problem that he or she overlooks alternatives obvious to a person who is not as close to the problem.

Suppose that in defining the reject problem explained in Figure 2.3, the supervisor concluded that the difficulty was a faulty machine. Possible alternatives might include:

1. Repair the machine.
2. Replace the machine with a reconditioned one.
3. Replace the machine with a new but identical model.
4. Replace the machine with a new, more modern model.
After the problem and possible alternatives have been identified, the next step is to gather and organize facts that are relevant to the various alternatives. It is difficult, if not impossible, to make sound decisions without the pertinent facts. At the same time, however, a supervisor rarely has all of the facts that he or she would like. Of course, the timeliness of the decision has a major impact on how much data to gather and analyze. Successful supervisors learn to make decisions based on the available facts plus those that can be obtained within a reasonable amount of time and at a reasonable cost. Figure 2.4 lists some general questions that might be addressed in this phase.

It should be mentioned that today’s supervisor can be faced with too much information instead of not enough. Computers and modern technology have made information overload a real problem for many supervisors. This occurs when the supervisor receives irrelevant reports, computer printouts, and memos. It is not unusual for a simple and useful report to evolve into a large report with very little useful information. The problem facing the supervisor then is to sort out the relevant from the irrelevant information. Thus, organizing the available facts can be a difficult task.

Once the facts have been gathered and organized, the next step is to evaluate each of the alternatives. Generally, this involves a comparison of their costs, the time required to implement them, their expected end results, and an evaluation of how the alternative would affect other areas of the business. Using the collected data, the supervisor should project what would happen if each of the alternatives were implemented. How long would this take? How much would it cost? What would be the favorable and unfavorable outcomes? It is usually helpful to develop a system for recording the evaluations in some written form. Table 2.1 shows a sample format. Such an approach provides much more objectivity than a simple mental evaluation of the alternatives. It permits all of the alternatives to be compared at the same time, and it uses the same categories of information in evaluating all those alternatives.

Choosing the best or most desirable alternative is not always as easy as it seems. Certainly, this step is made easier if the previous steps in the decision-making process were thorough. After the costs, time, and potential outcomes have been evaluated, the decision still requires some judgment and even willpower on the part of the supervisor. While some alternatives can usually be eliminated as soon as the data have been collected, others may require a closer look. In such situations, the supervisor draws on experience, intuition, and suggestions from others in making the final choice. Caution is necessary to prevent personal biases and prejudices from influencing the decision.

It is not unusual for the supervisor to select the best of the alternatives being considered even if none of them appears to be satisfactory. The tendency here is to select an alternative and thus get the decision out of the way. In essence, completing the decision becomes more important than the decision itself. In such situations, a viable alternative that should be considered is to do nothing. This alternative gives the supervisor time to go back and seek additional alternatives.

After the final decision has been made, the supervisor should take the necessary steps to implement it. These steps include assigning responsibilities, communicating the
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TABLE 2.1 Sample Format for Evaluating Alternatives

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Time Required to Implement (days)</th>
<th>Estimated Costs ($)</th>
<th>Favorable Points</th>
<th>Unfavorable Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Repair machine</td>
<td>15</td>
<td>2,000</td>
<td>Employees are familiar with the machine; it has proved itself.</td>
<td>Might break down again soon; not as fast as new machine; takes longer to fix.</td>
</tr>
<tr>
<td>B. Replace with reconditioned machine</td>
<td>8</td>
<td>4,500</td>
<td>Same as old machine; no training necessary. Old machine has some salvage value.</td>
<td>Reconditioned machine may not last as long as new one; not as fast as some new models.</td>
</tr>
<tr>
<td>C. Replace with new but identical machine</td>
<td>5</td>
<td>6,000</td>
<td>Same as old machine; no training necessary; likely to last a long time.</td>
<td>Relatively expensive.</td>
</tr>
<tr>
<td>D. Replace with new, more modern machine</td>
<td>5</td>
<td>7,000</td>
<td>Fastest machine available; additional production may be needed in the future; likely to last a long time.</td>
<td>Most expensive; operator will require some training.</td>
</tr>
</tbody>
</table>

The final phase of the decision-making process is to evaluate the outcomes of the decision. The basic questions to be answered are: Did the decision achieve the desired results? If not, what went wrong? Why? The answers to these questions can be of great help in a similar future situation. Unfortunately, many people have a tendency to stick with a decision even when it begins to be apparent that it is not going to work well. The key is to learn from the past and apply this knowledge to future decisions.

Group Decision Making

Two heads are better than one . . . or are they? Let’s examine the pros and cons of this cliché. There are many advantages to involving the members of the work group in the decision process. The most obvious advantage is that with several people participating, there are more resources to call upon. This usually results in the generation of more and better alternatives. An equally important advantage is that the participation of group members in decisions results in their commitment to the decisions that are made. People more readily accept decisions in which they have participated than those that are forced upon them. If people participate in reaching a decision, they usually feel a commitment to make it work. The value of involving group members extends beyond the final decision. A more complete understanding of what alternatives were considered and how each was evaluated can
be of enormous help in getting the group to accept change. This is especially true if those who must implement the change are the ones who participated in the decision.

Group decisions can be very advantageous in certain situations. However, group decisions have drawbacks that make individual decisions preferable in other situations. In general, groups that are not knowledgeable or organized will usually not make good decisions. And because group decisions almost always require more time, an individual decision is generally best when there is a critical time limitation. Another drawback to group decisions is the possibility that groupthink might occur. Groupthink occurs when the drive to achieve consensus among group members becomes so powerful that it overrides independent, realistic appraisals of alternative actions. In other words, the group becomes more interested in achieving consensus than in making the best decision. The underlying causes of groupthink can be pressure from management to reach a decision, limited resources, limited time, or merely pressure to conform. As a result of groupthink, criticism is suppressed and conflicting opinions are inadequately considered. A further potential problem with group decisions is the possibility that one person may dominate and control the group. It is also possible that pressure to conform may inhibit certain group members. Yet another possibility is that competition within the group may develop to such an extent that winning becomes more important than the issue itself. A final hazard of group decisions is the tendency of groups to accept the first potentially positive solution and give little attention to other alternatives. Rather than depending on a simple majority rule, effective groups go out and gather more information if the group is not convinced that they have reached a good solution.

In summary, group decisions are generally preferable where avoiding mistakes is of greater importance than speed. Figure 2.5 summarizes the positive and negative aspects of group decision making. One way to enhance the effectiveness of group decision making is to provide preparatory training for employees concerning the process.

Group participation in decision making is not an all-or-nothing proposition. The degree of participation can vary widely from situation to situation. A common approach is for the supervisor to set certain limitations on the decision before turning it over to the group. Another approach is for the supervisor to reserve the right to modify or reject the group’s decision. Still another approach is to have the group assist in the generation and evaluation of alternatives but not in the final selection of an alternative. Whatever approach is used, the supervisor must always be honest with the group and not mislead it as to what its role will be. The supervisor who asks for the group’s input but never uses it is quickly recognized. Everyone is familiar with the supervisor who asks for the group’s opinion and then does exactly what he or she wants to do anyway.
Collaboration, a form of group decision making, has become a popular and profitable means of operation in engineering circles. Today's Internet technology gives many different contributors an opportunity to participate simultaneously in new product design. The result is often a savings in time and money.

For example, engineer Bill Hasbrook of speaker manufacturer Phoenix Gold recently cut the product development time for a new woofer by 71 percent. Hasbrook was able to realize this significant savings by using software that simultaneously involved the internal marketing, purchasing, and manufacturing departments in the design process. The same software also solicited the input from toolings vendors during the design process. To quote Hasbrook, "By collaborating with vendors and internal departments, we found out about needed changes early and didn't have to tweak designs repeatedly."


**Practical Traps to Avoid When Making Decisions**

Many supervisors have a tendency to fall into one or more traps in making decisions. This section outlines some of these traps and offers some suggestions for avoiding them. It should be noted that these traps are not discussed in any order of importance.

**Trap 1: Making All Decisions Big Decisions**

Everyone has run into the supervisor who treats every decision as if it were a life-and-death issue. Such a supervisor spends two hours deciding whether to order one or two boxes of rubber bands. This approach wastes much of the supervisor’s time. It also keeps the employees confused; they have a hard time distinguishing between the important and not so important issues. As a result of this approach, the really important problems may not receive proper attention because the supervisor becomes bogged down in unimportant matters. This type of supervisor must learn to allocate an appropriate amount of time to each decision, based on its relative importance.

**Trap 2: Creating Crisis Situations**

Some supervisors seem to delight in turning all decision situations into crisis situations. A true crisis occurs when a decision must be made under extreme time constraints. In actuality, very few crises occur naturally. What usually happens is that the supervisor transforms a normal situation into a crisis situation. Even when a true crisis does occur, such as the breakdown of a major piece of equipment or an accident, the supervisor must learn to remain calm and think clearly. It is a good habit to always ask yourself, “How much time do I really have to make this decision?” It is easy and even natural to assume that you have less time than you actually do.

**Trap 3: Failing to Consult with Others**

The advantage of consulting others in the decision-making process was discussed earlier in this chapter. Yet some supervisors are reluctant to consult others. They fear that asking for advice will make them look incompetent. Many supervisors, especially new ones, are under the impression that they should know all the answers and that to ask someone else for advice would be admitting a weakness. These are natural tendencies and should be
recognized as such. Successful supervisors learn to put good sense and their reasoning ability ahead of ego.

No one makes the best decision every time. If a supervisor makes a bad decision, it is best to admit this and do what is necessary to correct the mistake. The worst possible course is to try to force a bad decision into being a good decision. For example, suppose you buy a used car. After you have owned the car for a couple of months, it becomes apparent that the car is a lemon. It would probably be much better to admit the mistake and get rid of the car, even at a loss, than to pretend that the decision was a good one and continue to pour more money into the car. Again, the natural tendency is to not admit mistakes.

Some supervisors may admit their mistakes but seem to be forever regretting their decisions—the good ones as well as the bad ones. These people always want to change the unchangeable. A typical sentence of theirs starts with the words “I sure wish I had . . .” Once a decision has been made and is final, don’t brood over it. Remember, very few decisions are totally bad; some are just better than others. Often, a supervisor who spends time dreaming about “what ifs” will not have enough time to implement the current decisions.

Why reinvent the wheel? If a similar decision situation has occurred in the past, supervisors should draw on that experience. If a certain situation seems to be constantly recurring, it is usually useful to implement a policy covering the situation. For example, it is wise to have a policy covering priorities for vacation time. Also, supervisors should keep abreast of current organizational policies. These can often help in decision situations.

Supervisors often ignore or fail to utilize available factual information. One common reason for this is that some degree of effort is normally required to gather and analyze data. In other words, it is easier to utilize only the data already on hand. A related problem is separating the facts from gossip and rumor. The general tendency is to believe only what one wants to believe and not to consider the facts.

Supervisors sometimes make commitments when they don’t have the necessary authority. Similarly some supervisors make promises that they know they can’t keep. This is usually done to make the decision-making process easier for the supervisor. Also, supervisors may view such commitments and promises as ways of getting subordinates to go along with decisions. Such an approach almost always comes back to haunt the supervisor. The best approach is to promise no more than can be delivered.

As discussed in an earlier section of this chapter, many supervisors tend to put off making a decision “until we have more information.” Timeliness is often critical and even good decisions can be ineffective if delayed too long. It is rare that any supervisor ever has all the information he or she would like. The key is for supervisors to know when they have adequate information.

Being creative does not necessarily mean coming up with revolutionary ideas. It does mean taking a fresh and uninhibited approach when making decisions and not being restricted by what has been done in the past. From a supervisory standpoint, being creative relates not only to the personal ideas of the supervisor but also to the climate that the supervisor develops. Creative supervisors not only have new ideas but also elicit new ideas from their employees. The supervisor sets the creative tone; if he or she encourages creativity, the employees sense this and act accordingly.
The Creative Person

People tend to think of themselves and others as being creative or not creative. But being creative is not an all-or-nothing characteristic. Everyone can be creative to some extent. Creativity is not a mysterious power given to a select few. Typically, the person who believes “creativity is not my bag” has never tried to use his or her creative powers. Figure 2.6 lists some general characteristics of people who tend to excel in creativity.

Unfortunately, most creativity is suppressed in the growing-up process. In fact, studies have shown that by the age of 40 the average adult retains only about 2 percent of the creativity that he or she possessed at age 5. The key to improving personal creativity is unlocking the untapped creative potential that most people possess.

One aid to being creative is to concentrate. Think of only one problem or subject at a time, and strive to get as many different ideas as you can. Try and think “outside the box.” Do not be limited by what seems to be practical. The initial step is to get a number of ideas. The evaluation of each idea takes place later. It is important that you use your subconscious brain. To do this, rest your conscious mind when you feel tired. The subconscious brain then takes over and reviews and relates thoughts that the conscious mind produced. This is commonly called “sleeping on the problem.” In addition, be persistent. Keep trying. Useful ideas seldom result from the first attempts. You may well go over many ideas before you discover the one best suited to the situation. Finally, implement the idea. This can be a difficult step. It has been said that the most difficult task in the world is to drive an idea through the skull of a human being.

Establishing and Maintaining a Creative Climate

Every supervisor is responsible for the type of environment that he or she creates. Just how does the supervisor go about developing a creative environment? First and foremost, supervisors must demonstrate that they value creativity. All too often, supervisors pay lip service to creativity while rejecting any and all suggestions for doing things differently. Employees judge supervisors by what they do, not by what they say. Almost everyone has at one time or another approached the boss with a new idea only to be flatly rejected or ignored. This does not have to happen many times before employees “get the picture” and quit coming up with new ideas. On the other hand, the supervisor who reinforces creativity continues to get new ideas from employees. Group decision making, which was discussed earlier in this chapter, is one method of encouraging creativity among employees. Several other methods are discussed in the following sections.

Brainstorming

Brainstorming is an approach that involves presenting a problem to a group of people and then allowing the group to develop ideas for solutions. The basic approach is to encourage all participants to suggest any and all ideas that come to mind. The ideas may be wild and seemingly impractical, but they may lead to a creative solution. To encourage
BRAINSTORMING EXERCISE
Some organizations are now using electronic methods for brainstorming. For example, Fayetteville Technical Community College in Fayetteville, North Carolina, has a Team Focus Room that has computers positioned around a large screen. After team members have been presented with a problem, they enter their responses on keyboards that are hidden under a glass top. The responses are then projected on a screen with a reference number that does not indicate who typed in the response. Members can respond immediately to any response that appears on the screen. As the responses appear on the screen, they are also fed to a computer printer and can be picked up after the problem-solving session.

The Team Focus Room can be used by local businesses for a fee. Many business users have stated that the use of the room is well worth the cost because it enables them to get better results faster and cheaper. Some business users have even stated that the Team Focus Room enabled them to produce better results in one day than they might otherwise have obtained in five days!


the free flow of ideas, no criticisms of suggested solutions are allowed at first. Only after all ideas have been presented and recorded does the group begin to evaluate them. Ideally, a brainstorming session should last from 45 minutes to an hour. The problem should not be discussed before the session. A small room and conference table should be used to encourage free communication. After the problem has been presented, a response should be sought from each participant. If an individual offers a suggestion, it is recorded. A person who does not have a suggestion merely says “pass.” This process is repeated around the table a number of times until everyone passes. Such a procedure allows everyone an equal chance to participate and it prevents a few people from dominating the process.

Brainstorming is most applicable to simple decision problems requiring creative ideas. Naming a new product or service, coming up with a new use for a product, and identifying new ways to reduce wasted time are examples of situations where brainstorming might be effective. Supervision Illustration 2–2 describes an electronic-assisted method for brainstorming.

Brainwriting
Under brainwriting, group members are presented with a problem situation and then asked to jot down their ideas on paper without any discussion. The papers are not signed. The group members then exchange the papers with others, who build on the ideas and pass the papers on again until all have had an opportunity to participate.

Synectics
Synectics is a relatively new technique used in creative problem solving. Synectics uses metaphorical thinking to “make the familiar strange and the strange familiar.” Analogies are the best method for doing this. There appear to be several basic forms from which to springboard ideas:

• **Personal analogies.** Place yourself in the role of the object.
• **Direct analogies.** Make direct comparisons.
• **Symbolic analogies.** Look at the problem in terms of symbols.
• **Fantasy analogies.** Imagine the most perfect solution.

As an illustration of the fantasy analogy method, or “goal wishing,” the participants fantasize about how a particular problem could be solved if there were no physical
ENCOURAGING NEW IDEAS

Norse Dairy Systems (NDS) is a Columbus, Ohio, supplier of baked ingredients and novelty packaging, as well as filling and packaging equipment. NDS uses nontraditional methods for identifying opportunities that in hindsight one tends to say, “Why didn’t anyone think of this before?”

For example, a couple of years ago, NDS conducted its first “100 New Ideas Workshop.” The workshop was based on the ideas of Edward de Bono, a leading authority in the field of creative thinking. De Bono divides thinking into two methods, vertical thinking and lateral thinking. Vertical thinking is the traditional, historical thinking process based on using the processes of logic. Lateral thinking is the traditional, historical thinking process based on using the processes of logic. Lateral thinking involves disrupting an apparent thinking sequence and arriving at the solution from another angle. De Bono believes that developing breakthrough ideas is not a talent, or the result of luck, but rather a skill that can be learned.

NDS went into its first workshop hoping to come up with 100 ideas, hence the name of the workshop. The result was over 500 new ideas. These 500 ideas eventually resulted in numerous new product concepts.

NDS now offers its “100 New Ideas Workshop” free of charge to ice cream manufacturer customers in order to identify ideas that can provide a significant competitive advantage in the marketplace.


SUPERVISION ILLUSTRATION 2–3

Barriers to Organizational Creativity

Constraints. After developing a list of wishful solutions, the participants are encouraged to come up with the most absurd solutions they can imagine. Often at least one or two of these solutions can be refined into practical solutions. Supervision Illustration 2–3 describes how one company encourages innovation and creativity by periodically holding workshops designed to generate new ideas.

Many organizations and supervisors have created numerous barriers that inhibit organizational creativity. Usually, but not always, these barriers have been established unintentionally, yet their effect is to discourage creativity among employees. Some of the more frequently encountered examples of organizational creativity barriers are:

- **Fear of failure.** The simple fear of failure prevents many people from ever trying anything creative.
- **Premature criticism.** Premature criticism and judgment of new ideas can quickly cause people to shy away from creative ideas.
- **The supervisor’s shadow.** Some supervisors create an environment that encourages employees to try to anticipate the way the boss is thinking. This discourages individual creativity.
- **Distractions and interruptions.** Creative thinking is enhanced by quiet and uninterrupted periods of thinking time.
- **Protection of the status quo.** Creative ideas often affect the status quo, and those who challenge the status quo often meet with criticism, lack of support, and threatened self-esteem.
- **Hierarchical idea filter.** The more hierarchical levels an idea must pass through to be implemented, the greater the chances of its being distorted or lost.
- **Appropriated ideas.** Some supervisors take credit for ideas that actually originated with one or more subordinates. This appropriation naturally discourages subordinates from generating new ideas.
- **Lack of support.** Creative ideas are enhanced when they are supported by the supervisor and fellow employees.
- **Excessive togetherness.** Excessive togetherness saps individuality and promotes consensus ideas that are rarely creative.
Jane appears to have recognized the need to make decisions as a supervisor (pp. 22–23). If she is not already doing so, it would benefit her to get in the habit of using the scientific method to work through decisions. The major advantages of the scientific method are that it is systematic and objective (pp. 23–26).

As for coming up with and implementing better ways of doing things, Jane should try some of the approaches suggested in this chapter. First and foremost, she should concentrate on creating the proper climate to encourage new ideas (pp. 29–30). At a minimum, this means giving every suggestion a fair hearing. If a suggestion is workable, Jane should implement it and give the employee credit. If a suggestion is unworkable, she should take the time to explain why it won’t work.

Next, Jane should utilize group decision making whenever possible. This might result in more creative solutions, and it would almost certainly increase the employees’ acceptance of the decisions reached. Brainstorming, brainwriting, and synectics are all techniques that might be tried as appropriate opportunities present themselves (pp. 30–32).

Summary

This chapter emphasizes the importance of decision making for successful supervision. It describes the scientific method for making decisions and discusses several traps to avoid when making decisions. The chapter also gives particular attention to establishing a climate that encourages creative decisions.

1. Discuss the importance of recognition and timeliness in decision making. Recognizing the need to make a decision is a natural prerequisite to making a sound decision. Timeliness is also critical to a sound decision. Good decision makers realize that different decisions must be made within different time frames.

2. Differentiate between programmed and nonprogrammed decisions. Programmed decisions are reached by following an established or systematic procedure. Nonprogrammed decisions have little or no precedent and are relatively unstructured and generally require a more creative approach by the decision maker.

3. State the steps taken in the scientific method of decision making. The scientific method of decision making is composed of the following steps: (1) be alert to indicators and symptoms of problems, (2) tentatively define the problem, (3) collect facts and redefine the problem if necessary, (4) identify possible alternatives, (5) gather and organize facts, (6) evaluate possible alternatives, (7) choose and implement the best alternative, and (8) follow up.

4. Name several potential advantages and disadvantages of group decision making. Potential advantages of group decision making include (1) the sum total of the group’s knowledge is greater, (2) the group generally develops a much wider range of alternatives, (3) participation increases the acceptability of the decision to the group, and (4) group members better understand why a decision was made.

Potential disadvantages of group decision making include (1) it takes more time, (2) groupthink may occur, (3) one individual may dominate or control the group, (4) pressures to conform may inhibit group members, (5) competition may become overly intense among group members, and (6) groups have a tendency to accept the first potentially positive alternative.

5. List several traps that supervisors frequently fall into when making decisions. Among the traps that supervisors frequently fall into when making decisions are (1) making all decisions big decisions, (2) creating crisis situations, (3) failing to consult with others, (4) never admitting a mistake, (5) constantly regretting decisions, (6) failing to utilize precedents and policies, (7) failing to gather and examine available data, and (8) promising what cannot be delivered.

6. Discuss the role that the supervisor plays in establishing a creative environment. The supervisor sets the creative tone; if he or she encourages creativity, the employees sense this and act accordingly.

7. Describe several group-oriented techniques that can be employed by supervisors to encourage creativity. Brainstorming is an approach that involves presenting a problem and then allowing
the group to develop ideas for solutions. Only after all ideas have been presented and recorded are any criticisms or evaluations of ideas allowed. In brainwriting, group members are asked to jot down on paper their ideas relating to a problem. Without discussion, the unsigned papers are then exchanged. The recipients build on the ideas and pass the papers until all have had an opportunity to participate. The input-output scheme first requires group members to describe the desired output of a problem. The next step is to list all possible combinations of inputs that could lead to the desired output. These possibilities are then evaluated until one emerges as the most preferred.

8. **Itemize some of the more frequently encountered barriers to organizational creativity.** The more frequently encountered barriers to organizational creativity include fear of failure, premature criticism, the supervisor’s shadow, distractions and interruptions, protection of the status quo, hierarchical idea filter, appropriated ideas, lack of support, and excessive togetherness.

### Review Questions

1. Give at least three examples of expected decisions and unexpected decisions that a supervisor might face.
2. Name the steps in the scientific approach to making decisions.
3. Why is it usually a good idea to generate several alternatives when making a decision?
4. Discuss both the positive and the negative aspects of group decision making.

### Skill-Building Questions

1. Do you think that the same general approach used in making organizational decisions should be used when making personal decisions? What are the differences and similarities?
2. Supervisor Bill Quane recently presented a decision situation to the members of his work group in order to get their input. Much to his dismay, he found considerable disagreement concerning the decision. At present, he is not sure what to do. What do you think he should do? Why?
3. As a supervisor faced with many decisions, how would you know which decisions should be made immediately and which should not be made immediately?
4. Identify a person whom you know that you consider to be highly creative. Does this person possess the characteristics shown in Figure 2.6?

### References

1. These steps were delineated by Margene E. Sunderland, Fayetteville Technical Community College, Fayetteville, North Carolina.
2. Thanks to Elliott F. Porter of Los Angeles Trade Technical College for the inclusion of this trap.
4. This list of barriers is summarized from Bencin, “How to Keep Creative Juices Flowing,” pp. 27–28.

### Additional Readings


Incident 2–1

A Second Chance?

Word came down to the office supervisor, Jill Clark, that the Bright-Star Company had decided to upgrade its computerized billing, payroll, and inventory systems. The new system was substantially different from the existing one and had the long-term advantage of requiring two less people to operate it. One disadvantage was that the remaining employees would require extensive additional training.

The vendor providing the new system estimated that it would take about six weeks to fully implement the new system. After consulting with her boss, Jill decided that the fairest thing to do would be to survey each of the department’s seven employees and see if anyone was interested in being transferred to another area. Jill was pleased that two employees said they would be happy to be transferred.

The Bright-Star Company had always demonstrated concern for its employees, and this instance was no exception. Jill was instructed to tell her employees that no one in the department would be laid off because of the new system.

The implementation period went very well, and the new system was successfully operating in just over six weeks. About six months later, however, and without much warning, sales for the company began to slow drastically. Jill soon received word to lay off five of the department’s employees. None of the computer operators would be affected by the layoffs since the computer would continue to be used. Among those to be laid off by Jill was Barbara Peters. Barbara had been with Bright-Star seven years and was one of the employees who had volunteered for reassignment. Within a few minutes of receiving her layoff notice, Barbara went to Jill’s desk.

Barbara: I’ve been here over seven years, and I need my job. You know my husband left me with three children to support.

Jill: I understand. Don’t forget, I also have children.

Barbara: I hear that none of the computer system employees will be laid off. Let me have a shot at one of those jobs. After all, I have over seven years with the company.

Jill: Barbara, you know you are not qualified for that. After all, you volunteered for reassignment. I’m simply following company policy, which states—and I quote—“When it is necessary to reduce our labor force, seniority shall apply, providing performance and skill are equal.”

Barbara: Seniority is the key word. You and I both know that I could learn to operate the new computer system in a few days. Originally, the idea scared me. But after seeing it in operation, I know I could catch on in no time. Jill, you owe me a second chance.

Questions
1. Do you think that the original decision regarding the selection of computer operators was fair? Justify your answer.
2. Do you think that Jill should reconsider her decision to lay off Barbara? Why or why not?
3. What alternatives are available to Jill, and which one would you choose?

Incident 2–2

Bad Times at Quality Shoe

Mack Moller was supervisor of the production department of the Quality Shoe Company. He received a call from the general manager informing him that production must be cut back 20 percent due to declining sales. Mack knew that this also meant that labor costs must be cut by approximately 20 percent. His problem was deciding where to make the cuts. Fortunately (as Mack saw it), Quality Shoe was not unionized. This gave him much more freedom to make decisions than he would have had if Quality were unionized. Some of the obvious alternatives were a layoff of employees based on seniority, a reduction of the hours worked by all employees, or a layoff of employees based on performance evaluations. Cutbacks were rare at Quality, and Mack knew that the current situation could cause a few waves if not properly handled.

Mack had recently attended a supervisory seminar on group and creative decision making and had been quite impressed. He decided that this would be an
excellent opportunity to try out some of the ideas he had learned. He strolled out on the floor and stopped at Ralph Russell’s workstation. Ralph had been at Quality almost 15 years, and Mack knew that he was well respected by all the production employees.

Mack: Ralph, we’ve got a problem. I just received word from the boss that production and labor must be cut by 20 percent.

Ralph: I’ve suspected that something like that might happen with the economy in a nosedive and everything else that is going on.

Mack: Ralph, I’d like you to get everybody in the department together [a total of 16 people] and discuss among yourselves how you think the cuts should be made. Once you reach agreement, let me know—but not later than the day after tomorrow! Try to come up with something creative.

Ralph: OK, Mack, but can’t you give us some general guidelines to go by?

Mack: I guess I could, Ralph, but for starters I’d like to see what you come up with on your own.

Ralph: Just how much weight will our decision carry? We don’t want to spend a lot of time on this if our ideas aren’t going to count for anything.

Mack: As long as it’s reasonable, I’ll implement it in its entirety.

Questions
1. What do you think of Mack’s approach to solving his problem?
2. How would you go about the task if you were Ralph?
3. What do you think Mack should do if he doesn’t think that the group’s decision is reasonable?

Exercise 2–1
Lost at Sea

This exercise is designed to demonstrate the value of group decision making. The exercise requires that you first make a set of decisions individually and then repeat the same decisions using a group format.

You are adrift on a private yacht in the South Pacific. Because of a fire of unknown origin, much of the yacht and its contents have been destroyed. The yacht is now slowly sinking. Your location is unclear because critical navigational equipment was destroyed and you and the crew were distracted trying to bring the fire under control. Your best estimate is that you are approximately 1,000 miles south-southwest of the nearest land.

Below is a list of 15 items that are intact and undamaged after the fire. In addition to these articles, you have a serviceable rubber life raft with oars large enough to carry yourself, the crew, and all the items listed below. The total contents of all survivors’ pockets are a package of cigarettes, several books of matches, and five one-dollar bills.

Your task is to rank the 15 items below in terms of their importance to your survival. Place the number 1 by the most important item, the number 2 by the second most important, and so on through number 15, the least important.

— Sextant
— Shaving mirror
— Five-gallon can of water
— Mosquito netting
— One case of U.S. Army C rations
— Maps of the Pacific Ocean
— Seat cushion (flotation device approved by the Coast Guard)
— Two-gallon can of oil-gas mixture
— Small transistor radio
— Shark repellent
— 20 square feet of opaque plastic
— One quart of 160-proof Puerto Rican rum
— 15 feet of nylon rope
— Two boxes of chocolate bars
— Fishing kit

After everyone has completed the above rankings, your instructor will divide you into groups. Your group is to then rank the same items using a group consensus method. This means the ranking for each of the 15 survival items must be agreed upon by each group member before it becomes part of the group decision. Consensus is difficult to reach. Therefore, not every ranking will meet with everyone’s complete approval. As a group, try to make each ranking one with which all group members can at least partially agree. Here are some guidelines to use in reaching consensus:

1. Avoid arguing for your own individual judgments. Approach the task on the basis of logic.
2. Avoid changing your mind if the change is only to reach agreement and to avoid conflict. Support
only solutions with which you are able to agree at least somewhat.

3. Avoid “conflict-reducing” techniques such as majority vote, averaging, or trading.

4. View differences of opinion as a help rather than a hindrance in decision making.

After you have completed your individual and group decisions, be prepared to discuss the following questions:

1. Were your group decisions better than your individual decisions? Why or why not?
2. Did any individual tend to dominate your group? If so, how could this situation have been better managed?


Exercise 2–2
Assessing Your Creativity

Most of us believe we are more creative than we really are. Take a maximum of four minutes each on solving the following three problems.

1. Draw four straight lines connecting the dots in the diagram without lifting your pencil (or pen) off the paper. You are permitted to cross a line, but you cannot retrace any part of a line.

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2. What do the following words have in common (other than that they are all in the English language)?
   - calmness
   - canopy
   - deft
   - first
   - sighing
   - stun

3. Place 10 circles of the same size in five rows with four circles in each row.

After you have attempted each of the above problems, be prepared to discuss the following questions:

1. Why do you think these “simple” problems were difficult for you?
2. Do you think grade-school children tend to do better or worse than adults on problems such as these? Why?