

Evaluating the effectiveness of organizations requires selecting the appropriate criteria. Many approaches are available, but to find the most useful approach, the evaluator should first answer . . .

Critical Questions in Assessing Organizational Effectiveness

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Some time ago, a colleague with whom I was comparing information about our graduate academic training posed this question: "Which institution would you say is more effective, Yale or Harvard?" In context, the question seemed a natural progression from our previous conversation, but viewed objectively it is clear this question can't be answered in a meaningful way when it stands alone. The answer depends on the criteria the evaluator has selected. The choice of criteria places boundaries around the concept of effectiveness and gives it a specific referent.

This same question, "Which is more effective, organization A or organization B?", lies at the center of research on organizations. It is a question, however, that causes more problems for researchers than

for practitioners. Organizational researchers continue to struggle to develop a general model for a systematic approach to measuring effectiveness. On the other hand, such judgments are regularly made, consciously or unconsciously, by people who make choices about which stock to buy, where to attend college, which organization will get their donations, where to have their baby, and so on. These choices, however, are frequently made on the basis of self-interest, tradition, or personal bias because those making them don't have a clear idea of the pertinent criteria of effectiveness.

A major challenge for organizational evaluation, therefore, is to discover the most useful lines for distinguishing between effective and ineffective organiza-

tions. Unfortunately, researchers have not yet agreed on the most appropriate criteria for making evaluations of effectiveness, the characteristics that differentiate effective organizations from ineffective organizations, or even what constitutes organizational effectiveness in the first place.

In this paper, I have tried to clarify the major problems facing those who evaluate organizational effectiveness and to suggest some ways to overcome these problems. Managers frequently rely on after-the-fact judgments of effectiveness—that is, they evaluate their organizations on the basis of criteria that justify what they have already done—and this may lead to narrow perspectives that don't contribute to long-term organizational survival.

This paper first reviews the four major approaches to evaluating organizational effectiveness and points out the limitations of each. It then examines a class of organizations to which none of these four approaches applies—that is, organizational anarchies. The discussion demonstrates why our current methods for evaluating effectiveness frequently are inadequate. The paper concludes by presenting six critical questions that evaluators must answer in order to overcome the problems encountered when assessing organizational effectiveness.

FOUR MAJOR APPROACHES TO EVALUATING EFFECTIVENESS

Until now, evaluators have used four major approaches to define and assess organizational effectiveness. The first and most widely used approach defines effectiveness in terms of how well an organization accomplishes its goals. Using this perspective, evaluators usually focus on the outputs of an organization—that is, the closer the organization's outputs come to meeting its goals, the more effective it is.

A second approach to effectiveness is the system resource approach. Under this approach, an organization's effectiveness is judged on the extent to which it acquires needed resources—that is, the more of the needed resources an organization can obtain from its external environment, the more effective it is. Organizational inputs designed to achieve a competitive advantage in the marketplace replaces the emphasis on outputs in this goal model.

A third approach to effectiveness focuses on the internal processes and operations of the organization. That is, effective organizations are those with an absence of internal strain, whose members are highly integrated into the system, whose internal functioning is smooth and typified by trust and benevolence toward individuals, where information flows smoothly both vertically and horizontally, and so on. Organizational interventionists often refer to such organizations as "healthy systems." In the process approach, organizations are more effective if they possess a greater degree of these internal characteristics; less effective if they possess a lesser degree of these characteristics.

The fourth approach to effectiveness is the strategic constituencies approach or the participant satisfaction model. This approach defines effectiveness as the extent to which all of the organization's strategic constituencies are at least minimally satisfied. A strategic constituency is any group of individuals who have some stake in the organization—for example, resource providers, users of the organization's products or services, producers of the organization's output, groups whose cooperation is essential for the organization's survival, or those whose lives are significantly affected by the organization. In this approach, the effectiveness of an organization is based on how well it responds to the demands and expectations of its strategic constituencies. Managers must focus on achieving a balance among

them. Advocates of the strategic constituencies approach have usually emphasized external constituencies, those powerful groups outside the organization that have a significant impact on its functioning.

Each of these four approaches provides useful guidelines for systematically assessing the effectiveness of organizations. The goal model, for example, is especially useful when organizational goals are clear, consensual, and measurable, as with a professional athletic team whose goal is to win games. The system resource model is most useful when there is a clear connection between resources received by the organization and what it produces (an organization that simply gathers resources and stores them is not effective). The more savings account customers and borrowers a savings bank can obtain, for example, the more profitable it can be. The process model is most appropriate when the internal processes and procedures of an organization are closely associated with what the organization produces, or with its primary task—for example, an automobile assembly plant, where the output is highly dependent upon the internal processes. The strategic constituencies approach is most appropriate when external constituencies have a powerful influence on the organization's operations or when an organization's behavior is largely reactive to strategic constituency demands—for example, a state legislature.

Exceptions to the Four Approaches

However, none of these models is appropriate in all circumstances and with all types of organizations. One problem with the goal approach, for example, is that some organizations may be effective in areas that don't coincide with their goals. For example, the National Aeronautics and Space Administration (NASA) was very effective in the

68 1960s in producing useful consumer goods

(an area in which no goals existed) as well as in its mandated goal to reach the moon. It was only after men landed on the moon and public criticism of the NASA program began to intensify that NASA used its previous contributions to consumer products as a criterion of success.

Another problem with the goal approach is that if the goals are too low, misplaced, or harmful, an organization can be ineffective even though it reaches those goals. For example, Boise Cascade—one of the largest, fastest growing corporations in America in the late 1960s—set a 20 percent growth in earnings per share per year as its major goal. The firm reached and even surpassed that goal for 12 consecutive years until 1971. In order to reach the goal, however, the firm had developed a form of operation that involved taking on risky projects that ignored certain environmental groups—a policy that brought bankruptcy and forced financial reorganization in 1972.

The Nestlé Company, whose explicit goal was to provide nutritional aid to infants in Third World nations, became so effective at replacing mothers' milk with baby formula that the company is being boycotted because it is viewed as being a perpetrator of widespread malnutrition and starvation in underdeveloped countries.

Similarly, the system resource approach isn't universally applicable in evaluating effectiveness. For example, an organization can be effective even when it doesn't possess a competitive advantage in the marketplace or when the most desirable resources aren't obtained. The "no-name" Seattle Supersonics did not succeed in attracting superstars to their basketball team in 1977 and 1978, yet even with a rookie coach and no standout stars the team reached the National Basketball Association finals in 1978 and won in 1979.

An organization may also be ineffective though it has acquired optimal re-



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sources and is highly competitive in the marketplace. There are firms that have become so successful in a particular market or domain, for example, that they have lost their ability to adapt to change. Several Swiss watchmaking firms provide a case in point. They became the most highly effective firms

in their industry in the world because of their fine jeweled, handcrafted watches. Then the microcircuit and digital revolution caught them so resource rich in this one market that they found it almost impossible to switch domains. Their effectiveness in the new, lower-priced, digital watch industry is consequently very low.

There are also exceptions in the applicability of the process approach, which focuses on internal organizational processes as the basic characteristic of organization effectiveness. For example, an organization may be judged to be highly effective even when its internal "health" is low (that is, when poor communication flow exists, strife and conflict are present, and members are not highly integrated). A classic example is the New York Yankees in 1977 and 1978. Lack of team discipline, fights among players and between players and coaches, threatened firings, turnover in key personnel, and lack of cohesion seemed to be the defining characteristics of that organization during the 1977 and 1978 baseball seasons. Yet the Yankees were the most effective team in baseball in terms of goal accomplishment; they won the World Series both years.

Economists frequently equate internal efficiency with organizational health; they argue that the most effective organizations are those that are most efficient (that is, that produce the least waste) or that have the smoothest internal processes. Yet long-term adaptation and innovativeness are often enhanced through conflict and the presence of organizational slack (unused resources). Inefficiency sometimes produces effectiveness.

On the other hand, organizations may be ineffective even when their internal health is high or when the organization's processes are good. For example, Irv Janis portrays President John Kennedy's cabinet as a highly cohesive, smoothly functioning group of decision makers. It was just these characteristics, however, that produced a

"groupthink" phenomenon. That is, the power of the group became so strong that it made the decision to invade the Bay of Pigs, a decision that proved to be highly ineffective and one that most of the cabinet members would not have made on their own.

The applicability of the strategic constituencies approach to evaluating effectiveness is also limited. This approach presupposes that organizations are effective to the extent to which they minimally satisfy strategic constituency demands; however, organizations can be rated as effective even though they ignore strategic constituencies or perform in contradiction to these constituencies' demands. This is particularly true in charismatically led organizations. For example, the famous "Swarthmore saga" by Frank Aydelotte in the 1930s was developed despite strong resistance from students, alumni, and trustees. Similarly, the newly founded Mormon church in the 1800s continued to function as an effective, growing organization even when it faced severe persecution, including an extermination order for all Mormons in the state of Missouri.

These examples illustrate that no single approach to the evaluation of effectiveness is appropriate in all circumstances or for all organizational types. Organizations may be judged ineffective even when they meet the criteria of each approach, or they may be judged effective even when they don't meet the criteria.

CHARACTERISTICS OF ORGANIZED ANARCHIES

These four common approaches to the evaluation of effectiveness are analytically independent; therefore, one of the four is generally appropriate for assessing most types of organizations. However, there is a class of organizations for which *none* of these approaches to evaluating effectiveness is ap-

propriate. This class of organizations, frequently referred to as *organized anarchy*, encompasses such organizations as schools, colleges and universities, large service organizations, business conglomerates, research and development organizations, political campaign organizations, and many government bureaus whose parts are loosely tied together and whose subunits are largely autonomous. Few common structures or linkages flow throughout organized anarchies to bind the subunits together. Either the most common linking pins—the technology or method of doing work, common purposes and goals, and the formalized hierarchy of authority—are not present in organized anarchies, or their linking power is weak.

The importance of organized anarchies is that their characteristics are becoming more and more widespread in organizations as environmental complexity and turbulence increases. For example, several authors have recently noted the increase in the number of environmental elements needing to be monitored by organizations, the increased speed of changes affecting organizations, and the proliferation of powerful external constituencies making demands on organizations. As a result, more and more organizations have adopted characteristics typical of organized anarchies in order to cope with their environments. And with the increase in anarchistic characteristics in organizations, the ability to accurately and reliably evaluate their effectiveness using the traditional models of organizational effectiveness decreases. A discussion of the characteristics of organized anarchies will show why this is so.

Here are some of the important characteristics of organized anarchies:

1. Goals are generally ill-defined, complex, changing, and contradictory. Organizational subunits are frequently pursuing goals that may be unrelated to the broader, more general organizational goals.
2. Means-ends connections are not

clear—that is, there is no obvious connection between the technology or the way work is done and the outcome. In a government agency such as the former Health, Education, and Welfare Department, it is difficult even to identify a successful outcome, let alone find agreed-upon means for accomplishing that outcome. It is not clear, for example, whether equal opportunity for adequate medical care for the underprivileged has been provided or what means are most useful for accomplishing that aim.

3. Similarly, more than one technology or strategy produces the same outcome in organized anarchies. For example, no matter how faculty members teach or what changes are made in the curriculum, the products of educational organizations (that is, how well students learn) don't seem to vary.

4. There is little or no feedback from the output to the input, and little feed-forward from inputs to outputs, so the casual connections between the two are not testable. That is, in organized anarchies, unlike the classic open systems model, there is no feedback loop. Information exchange between recipients of government service and the bureau itself is generally quite poor, for example, and almost nonexistent concerning inputs and technology.

5. Because subunits are not tightly connected, influences from the external environment are partitioned among them, and all but a small subset of factors can be ignored. Monitoring the broader environment and the organization's multiple constituencies need not occur in any one subunit. "Let someone else handle that" is a common strategy. Moreover, turbulence from external forces seldom diffuses throughout the entire organization because of the autonomous nature of the subunits. Trouble spots are largely contained within one or a few organizational subunits.

6. Widely differing criteria of suc-

cess may be operating simultaneously in various parts of the organization. Pursuit of success in one part of the organization may even inhibit success in another part of the organization. Trade-offs in excellence among teaching, research, faculty development, vocational training, and community service in colleges and universities are examples.

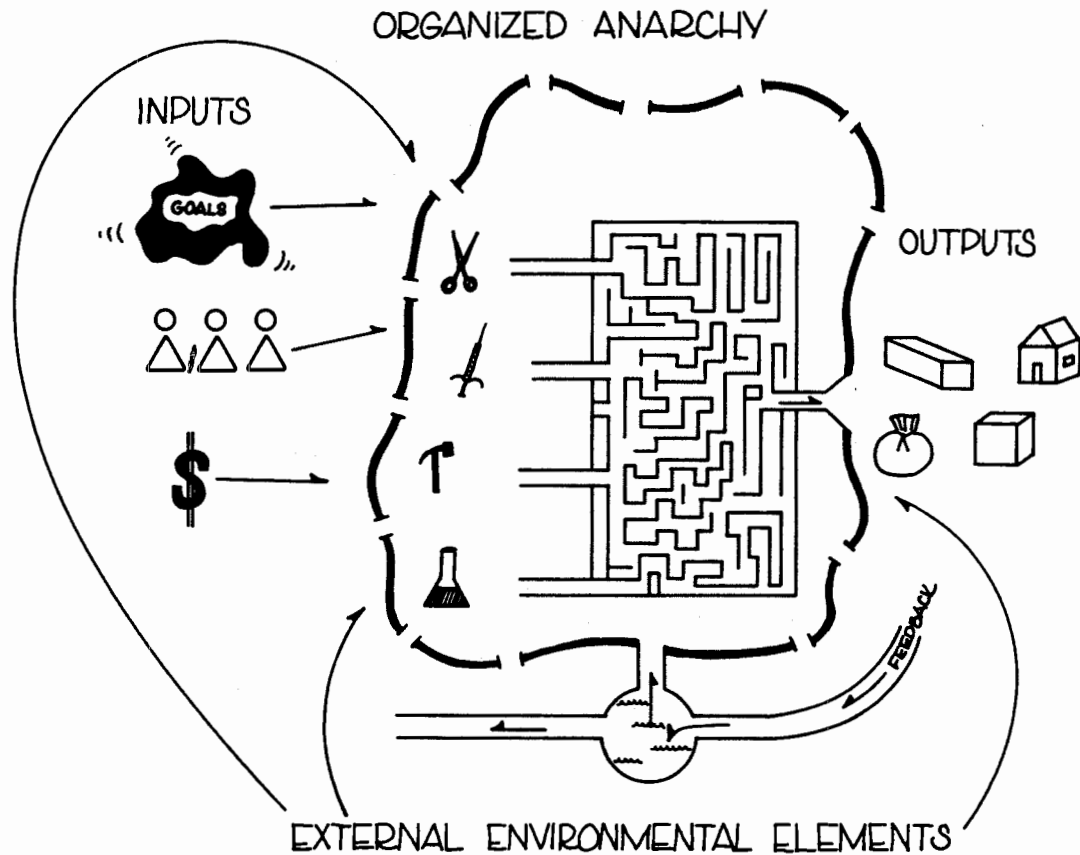
7. There is often an ambiguous connection between the organizational structure and the activities of the organized anarchy. That is, it is not unusual to find rigid structures and hierarchies (for example, strict professional ranking and formalized departmental divisions in hospitals) imposed upon a rather fuzzy process (for example, providing comprehensive quality patient care). Figure 1 illustrates these characteristics of organized anarchies.

Effectiveness in Organized Anarchies

The list of characteristics of organized anarchies can be lengthened, but these few are enough to illustrate why none of the four major approaches to defining and evaluating organizational effectiveness are applicable to these organizations. First, as mentioned earlier, reliance on the goal approach is most appropriate when goals are identifiable, specific, consensual, measurable, and time-bound; in other words, when goal attainment can be measured. In organized anarchies these conditions are not present. Vague, ambiguous criteria of effectiveness serve to keep organized anarchies adaptable, flexible, and able to respond to a wide diversity of expectations and demands. Moreover, vague evaluation criteria serve as an organizing force in an otherwise loosely organized set of subunits. A wide variety of subunit goals can be related to a set of highly ambiguous evaluation criteria.

Second, in organized anarchies there's no clear connection between inputs, 71

Figure 1
CHARACTERISTICS OF ORGANIZED ANARCHIES



or the resources an organization receives, and its outputs, or the products it produces. (Obtaining a lot of unused resources would not indicate effectiveness.) For example, the funding formula (input) for many government agencies and other publicly owned corporations is based not on the accomplishment of the primary task or on the level of output produced, but largely on what was budgeted during the previous fiscal year, and how much of that was spent. The causal association between organizational inputs and organizational outputs in many government agencies is also ambiguous. Because

generally absent in organized anarchies, the system resource approach doesn't seem to be an appropriate model.

Third, the usefulness of the process approach depends on an acknowledged relationship between internal processes in the organization and outcomes—that is, the connection between the technology or the processes used to accomplish the organization's tasks (as well as the way in which work procedures are organized) and the organizational outcome. (Smooth processes and internal health that don't produce an output would indicate ineffectiveness.) Again, in organized anarchies, more than

one technology produces the same outcome; there is no information flow between the work processes and the output; and the connection between widely varying organizational characteristics and the products of the organization is ambiguous. Consequently, the process approach to evaluating organizational effectiveness doesn't meet the requirements of evaluating organized anarchies.

The fourth major approach, the strategic constituencies approach, is most appropriate when external groups have major influence on organizational functioning. That is, this approach is highly appropriate for defining and evaluating effectiveness when organizational behavior responds to the demands and expectations of strategic constituencies. The loose coupling and semi-autonomous subunits present in organized anarchies, however, are precisely the mechanisms used to limit the power of external groups as they relate to the organization. That is, one function of loose coupling in organizations is to serve as a buffer against environmental encroachment. Loosely coupled subunits need respond only to a small part of the total environment, and the impact of any single constituency is generally confined to a small portion of the total organization. In organized anarchies, therefore, the influence of external constituencies is limited by the nature of the organizing process.

Because it is so difficult to evaluate the effectiveness of organizations with anarchistic characteristics, managers tend to seek simple, uncomplicated indicators to justify their effectiveness. That is, decision theorists have found that when complex and ambiguous decisions are encountered, overly simplistic decision rules are applied. In the case of deciding how effective an organized anarchy is, overly simplistic indicators frequently are relied upon. And the main criteria for including such indicators are that they are easily obtainable and quantifiable and that they justify *a priori* conclusions.

ON EVALUATING THE EFFECTIVENESS OF ORGANIZATIONS

Up to now, I have suggested that our current approaches to the evaluation of organizational effectiveness have major weaknesses, and in certain types of organizations—namely, organized anarchies—the common approaches are not applicable at all. This leaves unaddressed the problems of how to overcome these weaknesses and how to ensure a valid and reliable assessment of organizational effectiveness, especially in organized anarchies. The lack of good evaluations in the past prove there are no simple formulas for overcoming the problems associated with assessing effectiveness. However, my own studies of college and university effectiveness suggest that one useful strategy is to restrict the concept of organizational effectiveness to a very specific referent and to do what Karl Weick has called a “fine-grained analysis” of a limited aspect of the organization. This is done by focusing on certain critical *a priori* choices—referred to earlier—that help give the concept of organizational effectiveness some meaning in each evaluation. This means that certain critical choices should be made to guide the assessment of the organization—an assessment that will provide a basis for selecting among certain inevitable trade-offs. There can be no perfect evaluation, but effectiveness evaluations can be improved if these six critical questions are addressed.

1. *What domain of activity should be the focus of the evaluation?* Because of their loose coupling, most organizations—and organized anarchies in particular—operate in a variety of domains. My research shows, for example, that at least four major domains of activity can be identified in colleges and universities: (1) an academic domain emphasizing teaching, research, and professional development activities for faculty members and students, (2) an external

adaptation domain, emphasizing community service and adaptation to external pressures and providing career-oriented training and job skills that are useful outside the institution, (3) an extracurricular domain emphasizing the personal, social, cultural, and physical development of institution members, and (4) a morale domain, emphasizing the satisfaction and morale of students, faculty members, and administrators; smooth internal organizational processes; and an absence of internal conflict and strain. The research shows that colleges and universities differ significantly in the domains in which they are most effective and that effectiveness in one domain frequently mitigates against effectiveness in another domain. For example, those colleges and universities that are most effective in the academic domain generally are the least effective in the external adaptation domain. Effectiveness in the morale domain is related in a positive way to effectiveness in the academic domain, but not to effectiveness in the external adaptation domain.

The importance and relevance of particular domains of activity also change as organizations progress through their life cycles. My research on organizational development in production organizations through different stages has shown that individually oriented domains (that is, activities relating to the effectiveness of individuals in the organization) and activities focused on input acquisition are most important in early stages of organizational development and in times of high uncertainty and change. Domains focusing on organization/environment relations and the production of organizational outputs are most important at later stages in the life cycle when the organization has become institutionalized and bureaucratic. These findings suggest not only that different organizations emphasize and succeed in different domains, but that over a period of time any single organization may change

the domain(s) it emphasizes. In evaluating organizational effectiveness, the selection of the domain(s) of activity to be evaluated is very important.

The American Tobacco Company provides a good example of what happens to an organization when top management monitors and evaluates the firm's effectiveness on the basis of an inappropriate or outdated domain. In 1950 the American Tobacco Company held the largest market share in the U.S. cigarette market—almost double the market share of the other firms in the industry. The specific domain of emphasis was internal efficiency and economies of scale. Most of the firm's emphasis was placed on producing and marketing two of the best selling (nonfilter) cigarettes in the country. Other firms in the industry began diversifying and innovating in the mid-1950s while American Tobacco continued to evaluate itself on the basis of the scales of these two cigarettes through the mid-1960s. Annual reports during this period primarily emphasized the position of the company at the top of the nonfilter cigarette market. Unfortunately, the American Tobacco Company's share of the total cigarette market took a dive after the "health scare," and its market share is currently ranked fourth of the six firms in the industry. While the other firms had switched their emphases to domains of activity in the areas of diversification and innovation, the American Tobacco Company (now American Brands) continued to operate in an outdated domain.

2. *Whose perspective, or which constituency's point of view should be considered?* Effectiveness evaluations always reflect the values of some major constituency. That is, the criteria selected for any evaluation are derived from one particular point of view or perspective. And increasing organizational effectiveness from one constituency's perspective may result in lowering effectiveness from another constituency's

Figure 2
SIX CRITICAL QUESTIONS IN EVALUATING ORGANIZATIONAL EFFECTIVENESS

<i>Critical Question</i>	<i>Examples</i>
1. What domain of activity is being focused on?	Internal activities versus external activities.
2. Whose perspective, or which constituency's point of view, is being considered?	Internal constituencies versus external constituencies; satisfying all constituencies minimally versus satisfying one constituency maximally.
3. What level of analysis is being used?	Individual effectiveness; subunit effectiveness; or organizational effectiveness.
4. What time frame is being employed?	Short-time perspective versus long-time perspective.
5. What type of data are to be used?	Perceptual (from individuals) versus objective (from organizational records).
6. What referent is being employed?	Comparative—relative to a competitor; normative—relative to a theoretical ideal; goal-centered—relative to a stated goal; improvement—relative to past performance; trait—relative to effective traits.

perspective. (This is particularly likely in organized anarchies because of the wide diversity of constituencies.)

Organizations seldom, if ever, satisfy all strategic constituencies, and certain constituency viewpoints become more influential than others. This influence varies depending on the domain of activity. Constituencies whose viewpoints carry the most weight are frequently those that are perceived to have the most resources or to have the most stake in the organizational domain. Consequently, one alternative for evaluating organizational effectiveness is to select indicators from the standpoint of the most powerful constituency in the selected domain.

On the other hand, highly effective organizations may not satisfy *any* constituency completely; they may satisfy a variety of constituency demands in a variety of domains. Assessments made on the basis of only one point of view would miss that diversity.

Organizations that respond to a narrow set of constituency demands become specialized in purpose and domain, and they may lose the ability to adapt to a broader set of demands or expectations or to succeed

when important indicators of effectiveness change. The American Tobacco Company example illustrates this point. My research on college and university effectiveness seems to indicate that some organizations select a narrowing strategy where the range of constituency demands on them is limited. Others seem to operate using a strategy that satisfies a variety of constituencies in many different domains.

Selecting indicators from one powerful constituency's perspective or selecting more general indicators addressing multiple constituencies' perspectives should be a conscious trade-off in evaluating organizational effectiveness. What appears to be mediocre effectiveness from the standpoint of one constituency may really be high effectiveness when multiple perspectives are assessed—and, of course, the reverse is also true. The alternative chosen depends partly on the purpose of the evaluation and partly on the domain(s) of activity being evaluated.

3. *What level of analysis should be used?* This question refers to the level of aggregation to be used in the evaluation. There are at least three broad levels that can be

considered in evaluating organizations—that of individual members, that of groups or subunits, and that of the overall organization as a unit.

Although effectiveness on each of these levels of analysis may be compatible, achieving effectiveness on one level may mitigate against achieving effectiveness on another level. For example, employees at a small manufacturing firm may unionize in order to enhance resource acquisition at the subunit and individual levels by increasing worker power, salaries, and grievance resolutions—but at the same time this action may decrease effectiveness at the organizational level by destroying collegiality, undermining “system 4” characteristics, and creating adversary relationships among the institution’s constituencies. Another frequently cited example of this phenomenon in the private sector is increasing organizational productivity (for example, speeding up the line) while sacrificing individual satisfaction and individual development.

My research reveals that, from the standpoint of organizational members, the importance of different levels of analysis changes as the organization develops through various life stages. Concern for individual effectiveness is high in early stages when individual task assignments and operating procedures are not formalized, but this level of analysis declines in importance as the organization matures; in mature organizations it is the least important level of analysis. The organizational level of analysis, which is very unimportant in early development stages, steadily gains importance as the organization develops. Subunit effectiveness is consistently of high importance to organizational members no matter what the stage, but it also declines slightly during the maturing process.

Research by Michael Hannan and his associates has pointed out that organizational failure is frequently the result of focusing on the wrong level of analysis (that is,

a level where the important behavior does not take place). Therefore, the evaluator should be careful to select an appropriate level of analysis, depending on the domain and constituency, even though some levels are more difficult to assess than others. For example, the more loosely coupled the organization, the more difficult it is to assess effectiveness on higher levels of aggregation—for instance, the organizational level. Therefore, the most appropriate levels of analysis in loosely coupled organizations are the individual or subunit levels. When such an analysis is made on the organizational level, it must rely on either multiple constituency perspectives (which relate to the multiple levels of the organization) or on the constituency with a view that’s broad enough to cover the overall organization.

4. *What time frame should be employed?* The time frame is important because long-term effectiveness may be incompatible with short-term effectiveness. For example, organizational slack leading to adaptability is necessary for long-term effectiveness, yet it is inconsistent with operational efficiency, a popular short-term criterion of effectiveness.

In our study of the U.S. tobacco industry over a twenty-five year period, for example, Robert H. Miles and I found that distinct differences exist among the relative effectiveness of the six tobacco firms depending on whether long- or short-term criteria were being considered. Specifically, in using short-run versus long-run financial indicators, Phillip Morris is the least effective of the six firms in the short run, but it jumps to second most effective when long-term criteria are applied. Liggett and Myers (now the Liggett Group) is the most effective firm in the short run, but it drops to fifth in the long run.

The choice of time frame is important because organizations may want to trade off short-term effectiveness to guarantee long-term effectiveness. It is not unusual,

for example, for a firm to keep profit margins low in the short run in order to increase market share or to increase sales in the long run. On the other hand, organizations may emphasize short-term effectiveness without considering long-term effectiveness. Between 1970 and 1973, for example, Winnebago Industries, a leading manufacturer of recreational vehicles, was increasing its earnings by approximately 83 percent each year and, consequently, continued to invest heavily in expanded manufacturing facilities. Plant square footage increased seven times in those years while the number of buildings quadrupled. The company took this course despite warnings of future gasoline shortages and an energy crisis. In May of 1973, because the predicted gasoline shortage occurred, 60 percent of Winnebago's facilities were unused and earnings had fallen more than 36 percent.

Because the connections between short-term and long-term effectiveness frequently are ambiguous (especially in organized anarchies since means-ends connections are unclear), evaluators of organizational effectiveness should be sensitive to the trade-offs inherent in the choice of time frame.

5. *What type of data should be used?* Another choice faced by evaluators of organizational effectiveness is whether to use information collected by the organization and stored in official documents as indicators of effectiveness, or whether to rely on perceptions of members of organizational constituencies. This is a choice between using objective data (for example, company records) or subjective or perceptual data (for example, interviews and/or questionnaire responses) to assess effectiveness. Objective data have the advantages of being quantifiable and less potentially biased than individual perceptions, and of representing the official organizational position. On the other hand, objective data are frequently kept only on "official" criteria of effectiveness—an aspect that may make them rather narrow

in scope. Further, my experience in gathering objective effectiveness data has led me to conclude that organizationwide data are seldom kept, information is often ambiguous or confidential (a strategy to buffer the organization from external criticism), and only partial data are kept in any one place. In addition, as was illustrated earlier with educational organizations, proxy data that don't have readily apparent connections to the organization's primary task may be being used to assess effectiveness.

The advantage of subjective or perceptual data is that a broader set of criteria may be assessed from a wider variety of perspectives. The disadvantages, however, are that respondents' bias, dishonesty, or lack of information may hinder the reliability and validity of the data.

The selection of the type of data to be used is important because an organization may be judged to be effective on the basis of subjective perceptions, while objective data indicate that the organization is ineffective—or the reverse may be true. My research on college and university effectiveness, for example, shows that while some subjective and objective indicators of effectiveness are usually positively correlated, some others may be correlated negatively. That is, on some dimensions of effectiveness, constituency members perceived the organization to be highly effective while certain objective indicators indicated that the organization was ineffective. The same problem comes up when measuring other organizational characteristics. For example, objective indicators of an organization's structural and technological dimensions frequently correlate negatively with perceptual indicators of structure and technology.

A study by Robert Miles conducted at Harvard University illustrates some differences between objective and subjective indicators of effectiveness in production organizations. In comparing two organizations that differed widely in their effectiveness ac-

cording to objective measures (for example, output levels, resource acquisition, internal cohesion), he found that no difference existed between the two organizations on the basis of perceptual indicators of organizational effectiveness. Surprisingly, on the individual and the subunit levels of analysis, the least objectively effective organization was rated as *more* effective than the more objectively effective organization. Even though perceptual and objective indicators don't always correlate negatively, potential differences should be recognized.

6. *What referent should be employed?* Once effectiveness indicators have been selected, there are a variety of possible referents against which to judge those indicators. One alternative is to compare one organization's performance on the indicators against another organization's performance on the indicators (*comparative evaluation*)—that is, "Are we more effective than our competitor?" A second alternative is to select a standard or an ideal performance (for example, Likert's system 4 characteristics) and to compare the organization's performance against the standard (*normative evaluation*)—that is, "How are we doing relative to a theoretical ideal?" A third alternative is to compare organizational performance against the stated goal of the organization (*goal-centered evaluation*)—"Did we reach our stated goals?" A fourth alternative: Compare the organization's performance against its own past performance on the same indicators (*improvement evaluation*)—"Have we improved over the past year?" And a fifth alternative: Evaluate an organization on the basis of the static characteristics independent of its performance on certain indicators (*trait evaluation*). In this approach, the organization is evaluated on the basis of specific desirable organizational characteristics.

78 Goal-centered referents are the most frequently used in evaluations, but this

may be difficult in some organizations because goals are multiple, contradictory, changing, and ambiguous. Organized anarchies, in particular, have a difficult time evaluating effectiveness on the basis of goal accomplishment because of the attributes of their goals. Normative referents, or idea standards, face similar problems in organizations that operate in multiple domains or that are loosely coupled. Frequently an ideal standard is difficult to find (for example, an ideal performance standard for the former U.S. Health, Education, and Welfare Department is hard to imagine).

In comparative evaluation, meaningful indicators that are common to the organizations to be compared must be selected. As discussed above, this has been a major problem for evaluators of organized anarchies. When confronted with comparative evaluations of their organization, managers and administrators frequently say that no other organization is quite like theirs, so therefore "we can't be compared." Trait evaluation requires that the actual characteristics of effective organizations be described, usually by a panel of "experts." The emphasis is on organizational traits rather than on organizational behaviors; the assumption is that effective characteristics lead to effective behavior. The advantage of this approach is that respondents are less apt to report biased perceptions than they would in comparative, normative, or goal-centered evaluations because responses describe conditions in the organization, not *how well* the organization is doing. However, this approach may lead to a wide diversity of criteria and a very complex analysis.

Improvement evaluation can be approached in two ways: Improvement can be judged relative to the organization's own past performance—in which case an organization may improve relative to itself, but still be ineffective relative to other similar or-

ganizations. Or improvement can be judged on the basis of how the organization has changed in its effectiveness relative to its competitors. In the tobacco industry, for example, both R. J. Reynolds and Phillip Morris are highly effective firms when the evaluation is based on their improvement during the past 25 years. However, when comparing Phillip Morris' improvement and R. J. Reynolds' improvement relative to other firms in the tobacco industry, Phillip Morris appears to be the much more effective firm.

Summarizing, then, it is important that evaluators select the appropriate referent against which to compare effectiveness criteria. It is conceivable that one organization may be effective when judged on one referent (for example, accomplishing its goals) while it is ineffective when judged on another referent (for example, in comparison to major competitors.)

SUMMARY AND CONCLUSIONS

The point of this paper is relatively simple—that is, to gain meaningful results from any organizational evaluation the concept of organizational effectiveness must be clearly specified and limited. Figure 2 summarizes the six questions critical in this process.

It has been pointed out that problems of assessing organizational effectiveness are largely problems faced by researchers, not by managers and practitioners—that is, managers and practitioners have little difficulty identifying indicators of their organization's effectiveness when necessary. These effectiveness indicators are almost always after the fact and not derived systematically, are often products of personal biases, self interest, or tradition. Therefore, they may not be consistent or reliable, and they may not even relate to organizational functioning, outcomes, goals, or input acquisition activity.

Organizational researchers have been trying to define and evaluate organizational effectiveness to get a framework that will attain general consensus. To date there have been at least four major approaches proposed, but there has been little agreement on which is the most appropriate model for defining and assessing effectiveness. I have tried to show that each approach is analytically independent and that weaknesses exist in all of them. Furthermore, none of these four approaches appears to be appropriate for organized anarchies. The six critical questions presented should help clarify the meaning of organizational effectiveness in each type of evaluation and guide evaluators in the selection of appropriate criteria.

A final question remains—that is, of what concern are these questions to the practicing manager? Aren't managers more concerned with identifying the factors that increase organizational effectiveness than with concept indicators? Unfortunately, some managers may respond to a theoretical discussion of effectiveness criteria as an ivory tower exercise with little applicability to the world of corporate profits and government regulation. Managers don't find it hard to identify effectiveness indicators, and some may presume that all effectiveness criteria are imposed upon them by major constituencies. They may feel that they have little choice in the matter.

However, I am suggesting that an organization's effectiveness can rarely improve until it is clear what effectiveness is, and what criteria have been used to define it. One firm's effectiveness is another firm's failure. Furthermore, writers, such as John Child, Alfred Chandler, Raymond Miles, and others, argue that organizational functioning is more a product of strategic choices than of external determinants. The process of asking critical questions is a prerequisite to improving organizational effectiveness,

because it helps guard against unsystematic, self-perpetuating, conclusion-confirming evaluations. Managers answer these six critical questions, consciously or unconsciously, as they respond to certain pressures, constituencies, and criteria, but not to others. Choices can't be avoided. But consideration cannot be given to all relevant constituencies and to all relevant criteria, so some managers may limit their options by presuming that constituencies dictate their choices. Boise Cascade, The American Tobacco Company, Pittsburgh Brewery, and Winne-

bago Industries provide examples of the potentially detrimental effects of not rationally selecting optimal criteria of effectiveness and of presuming that powerful constituencies control organizational choices. Because the selection of criteria of organizational effectiveness has important effects on the strategies that organizations pursue, it is important that the selection be done thoughtfully and critically. And as more and more organizations take on characteristics of organized anarchies, these critical questions will become even more critical for practicing managers.



SELECTED BIBLIOGRAPHY

Two of the best sources on the notion of organized anarchies are James G. March and Johan P. Olsen's *Ambiguity and Choice in Organizations* (Bergen, Norway: Universitetsforlaget, 1976), and Karl E. Weick's, "Educational Organizations As Loosely Coupled Systems," (*Administrative Science Quarterly*, March 1976). These two works introduce and illustrate the characteristics of organized anarchies and discuss a variety of theoretical and methodological issues in evaluating, describing, and operating this type of organization.

More theoretical treatments of the major models of organizational effectiveness can be found in Paul S. Goodman and Johannes M. Pennings's *New Perspectives on Organizational Effectiveness* (Jossey-Bass, 1977), which is a compilation of essays on effectiveness by some of the senior scholars in the field; Richard M. Steers's *Organizational Effectiveness: A Behavioral View* (Goodyear, 1977), which provides an excellent review of relevant literature from several fields and an explanation of one approach to effectiveness;

and a forthcoming book by David A. Whetten and myself entitled *Organizational Effectiveness: A Comparison of Multiple Models* (Academic Press, forthcoming), in which several authors present models of effectiveness derived from various academic disciplines. These models are then compared and integrated.

My empirical work on assessing effectiveness in organized anarchies is best summarized in "Measuring Organizational Effectiveness in Institutions of Higher Education," (*Administrative Science Quarterly*, December 1978), and "Domains of Organizational Effectiveness in Colleges and Universities," (*Academy of Management Journal*, March 1981).

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