ACTION RESEARCH

Action research is a time-honored procedure for systematically improving organizations. As early as the 1940s, Commissioner of Indian Affairs John Collier (1945) described his use of the action-research model in interventions for improving race relations. Social-psychology pioneer Kurt Lewin (1946) used action research in projects to improve intergroup relations and to promote the consumption of less-desirable cuts of meat during the food-rationing years of World War II.

To this day, action research is an essential tool for behavioral scientists who are conducting organizational-improvement interventions. In their classic textbook on the technology of organizational improvement, Wendell L. French and Cecil H. Bell (1984) call action research "the basic intervention model that runs through most organization development efforts."

French and Bell define action research in two ways, as "organization development" and as "expert." They define the *organization-development* approach as:

> ...the application of the scientific method of fact-finding and experimentation to practical problems requiring action solutions and involving the collaboration and cooperation of scientists, practitioners and laypersons. The desired outcomes of the actionresearch approach are solutions to the immediate problems and a contribution to scientific knowledge and theory. (pp. 109-110)

One way in which organization-development (OD) consulting can be distinguished from *expert* consulting is OD's requirement that members of the organization identify and solve their own problems. The OD consultant resists the temptation to offer expert advice on how to solve the problems, thereby empowering members of the organization and gaining their commitment to solutions. (People tend to support solutions that they have created more strongly than they support externally imposed solutions.) Action research is an ideal instrument for consultants who are encouraging groups to take responsibility for their problems because the methods of action research allow the consultants to hold objective mirrors before the organizations as their members experiment with solutions. Action research is more than *action* to solve problems, and it is more than abstract *research;* it is a hybrid of both.

ACTION RESEARCH AND OTHER TYPES OF RESEARCH

Peter A. Clark suggested a taxonomy of research that gives some perspective to the concept of action research. Clark's taxonomy (1972, p. 10) identifies five classes of research:

1. ***Pure Basic,*** which deals with a "theoretical problem arising in basic discipline";
2. ***Basic Objective,*** which concerns a "general practical problem arising in many contexts";
3. ***Evaluation,*** which tackles a "practical problem (e.g., the success of training schemes)";
4. ***Applied,*** which explores a "practical problem (e.g. job enrichment)" experienced by the organization that is sponsoring the research; and
5. ***Action,*** which studies a "practical problem with theoretical relevance" on behalf of the organization that is sponsoring the research, the scientists, and the OD practitioners.

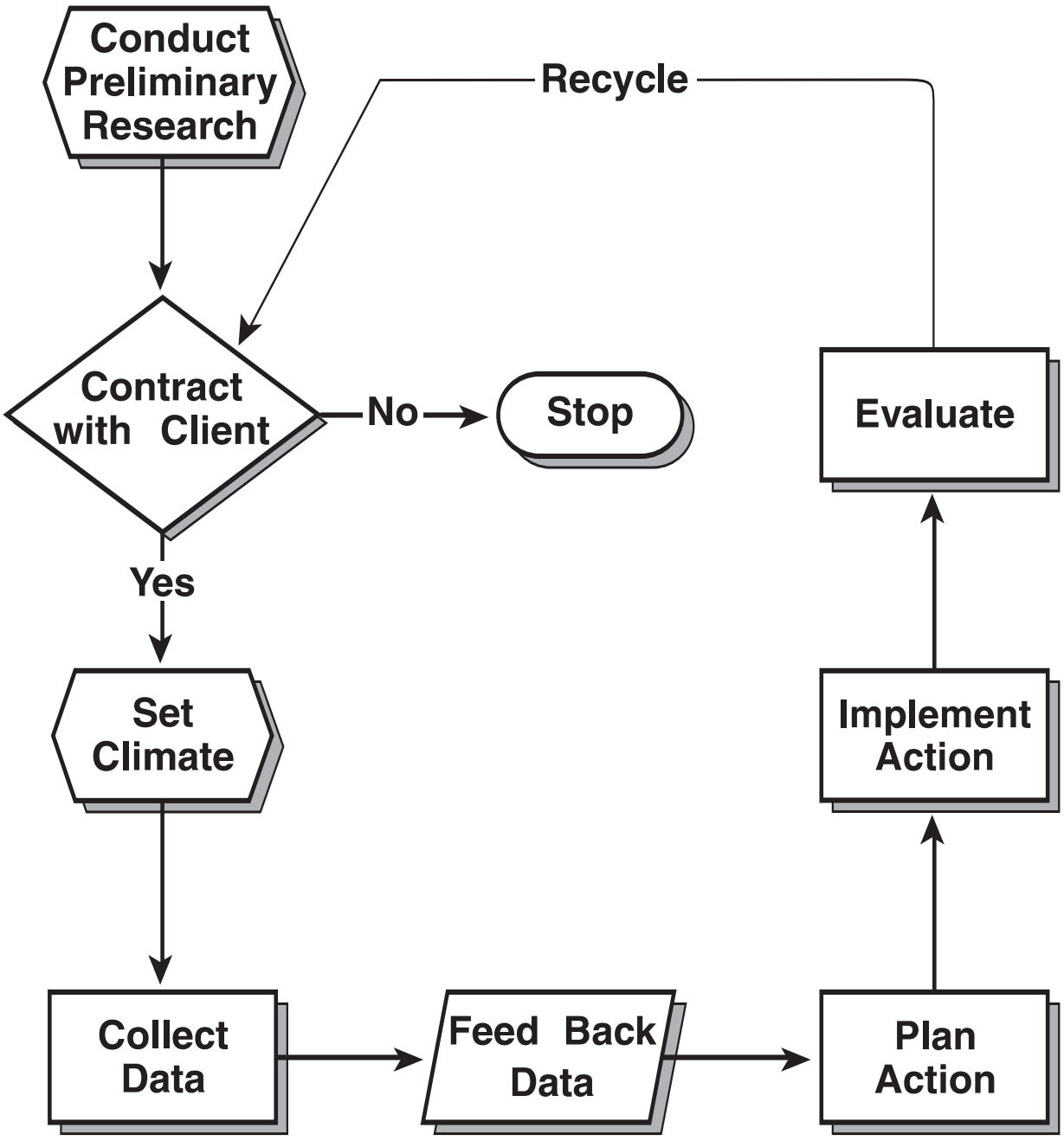
Clark's fifth category is consistent with the second definition of action research offered by French and Bell. Viewing action research as a *process,* French and Bell (1984) define it as:

> ...the process of systematically collecting research data about an ongoing system relative to some objective, goal, or need of that system; feeding those data back into the system; taking actions by altering selected variables within the system based both on the data and on hypotheses; and evaluating the results of actions by collecting more data. (pp. 107-108)

USING THE ACTION-RESEARCH MODEL FOR INTERVENTIONS

Not all changes are improvements. The action-research model is a practical tool for ensuring that planned changes in organizations actually are improvements. The figure on the next page illustrates how the action-research model could be used to structure the steps of an organization-development intervention.

In the first step, the consultant conducts *preliminary research.* (The action-research model refers to the "consultant," which often connotes an outsider, but the change agent for an organization-development project can be either an *external* consultant or an *internal* consultant.) In the case of an external change agent, some of this preliminary research might amount to a marketing study in order to find clients, but it also would include the casual and formal information gathering that occurs during the initial meetings between client and consultant. For internal consultants, preliminary research occurs during the period of trust building required to obtain managerial commitment to the change process. During this period, the consultant learns about the organization's problems and opportunities and informs the client about the methods and anticipated benefits of the action research process. The preliminary research terminates with the potential client's decision about whether to engage the consultant's services for the change effort. If the potential client does not accept the consultant's offer, the intervention stops. If the client says "yes," the *climate-setting* phase begins.



The Action-Research Model

During the climate-setting phase, the organization and the consultant become acquainted; and the action research is designed by the client and by the change agent, who acts as a behavioral-science-process expert. The action-research design is similar to that of an experiment, except that the subjects of this study (the members of the organization) obtain much more advance knowledge about research treatments and hypotheses than do the subjects of conventional experiments. The members of the organization, as subjects, also will participate in periodic revisions of the experiment's design—another point of departure from conventional research methodology.

After the climate-setting and design phases, members of the organization and the consultant cooperate to *collect data* about the organization and its interface with its environment. These data can take many different forms. For example, in a comprehensive organization-development project that was conducted in a department of a city in southern California, the OD team collected data about employee satisfaction, supervisory practices, job design, productivity (efficiency), performance (output), and citizen satisfaction with the department's services (Gross, 1979; Paul & Gross, 1981).

Next, the data are communicated to the members of the organization. Often, the *data feedback* will take place in team-building sessions. This allows organization members to view the organization's problems and opportunities objectively. Ideally, the data feedback will lead to concrete problem identification and analysis.

Using the data feedback, members of the organization *plan actions* to solve problems and to maximize the organization's opportunities. Finally, the organization *implements the recommended actions.*

The action steps are intended to improve the functioning of the organization; however, there is no guarantee that plans will accomplish their intended purposes. Organizations' social and physical environments probably will change; today's solutions are not necessarily adequate responses to tomorrow's challenges. Therefore, the next step of the action-research process is to *evaluate* the effects of the intervention, particularly to determine how well the intervention worked and whether future changes are advisable.

The action-research model is a closed-loop system; that is, after the evaluation, the next step is to *recycle* through the process. The action-research intervention then begins again with a *contracting* phase to determine whether the client wants to continue through another full cycle of the process. Presumably, if the process was cost-effective (returning greater benefits than its material and nonmaterial costs), the organization would want to repeat the process. Clearly, action research is not a "quick fix" or a "patch up" for ailing organizations. Instead, action research is an ongoing process of renewal for organizations that wish to optimize their health.

REFERENCES

Collier, J. (1945, May). United States Indian administration as a laboratory of ethnic relations. *Social Research, 12,* 275-276.

Clark, P.A. (1972). *Action research and organizational change.* London: Harper & Row.

French, W.L., & Bell, C.H. (1984). *Organization development: Behavioral science interventions for organization improvement* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Gross, A.C. (1979). *Human factors in productivity improvement: Vol. 1: Case study.* San Diego, CA: City of San Diego.

Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues, 2*(4), 34-46.

Paul, C.F., & Gross, A.C. (1983). Increasing productivity and morale in a municipality: Effects of organization development. In J. Straussman (Ed.), *New directions in public administration.* Monterey, CA: Brooks/Cole.

APPLIED STRATEGIC PLANNING

Applied Strategic Planning (ASP) was developed by J. William Pfeiffer, Leonard D. Goodstein, and Timothy M. Nolan (1985a). It is a process by which the top management of an organization envisions its future and develops the procedures and operations necessary to achieve that future.

Organizations need strategic planning because economic conditions, consumer expectations, competition, and many other factors change rapidly in today's world. ASP is very different from long-range planning or forecasting, and it is more than anticipating the future and trying to prepare for it. ASP helps the organization to *create* its future.

PHASE ONE: PLANNING TO PLAN

During the prework of the process, the organization's top management decides who will be involved, how long the process will take, who will research and develop the required data, and similar issues.

The organization's key decision makers serve as the planning team, which generally does not exceed ten to twelve permanent members. In order that the planning team be free to devote the necessary time and energy to its task, the formal planning sessions are conducted away from the interruptions of daily work.

All managers in the organization are called on to supply and/or process data to be used in planning and to develop ways to integrate and implement the action steps that emerge. It is essential that the planning team receive the information and support that it needs from the operational parts of the organization.

Timing

The planning team spends ten to fifteen full days in the first cycle of the planning process, spaced over nine to twelve months. The team meets approximately every six weeks for two or three days at a time. (This timing is affected by the size and complexity of the organization.) Between planning meetings, various members of the organization research, compile, and catalog data for the planning team to consider in the next stage of the process.

Because the strategic plan is the core of the organization's budget for the next year, strategic planning is scheduled so that the results can be fed directly into the budget considerations for the coming year. As the process is refined, the relationship between strategic planning and budgeting become more obvious and more automatic.

ENVIRONMENTAL MONITORING

Organizations always need to be aware of what is happening in their internal and external environments. This is especially critical during the planning process. Four overlapping environments, in particular, are monitored:

1. ***The Macro Environment:*** social patterns, changes in consumer needs, technology, economic trends, and political factors such as governmental deregulation.
2. ***The Industry Environment:*** the structure of the industry, how it is financed, the degree of governmental presence, typical products used, and typical marketing strategies.
3. ***The Competitive Environment:*** general competitor profiles, market-segmentation patterns, research and development, etc.
4. ***The Internal Organizational Environment:*** the structure of the organization, its history, and its distinctive strengths and weaknesses.

These areas are surveyed in depth to contribute to all phases of the planning process. One of the benefits of ASP is that the organization gains expertise in environmental monitoring.

ONGOING IMPLEMENTATION CONSIDERATIONS

Although implementation is the final step of the process, there is a need for implementation *throughout* the planning cycle. For example, the values scan may reveal incongruous values in different parts of the organization. Implementation considerations that arise during each step of the planning process are addressed then, not deferred until the final implementation phase.

PHASE TWO: THE VALUES SCAN

This is an examination of the values of the members of the management group, the current values of the organization, the organization's philosophy of operations, its culture, and the values of the stakeholders in the organization's future.

The values scan is the first formal step in the ASP process because the values of the managers in the organization (and of the organization as a whole) directly impact what can or cannot be accomplished within the organization.

Individual Values

This step is an examination of the personal values of the managers, including individual members of the planning team. Such values, especially those of managers, often become part of the organizational system. A manager who values risk taking will have a different impact than will a person who values security. Value identification is necessary

because the strategic plan represents the implementation of the consensual values of the management team.

Organizational Values

The values of the organization are evidenced by the end state or mode of behavior that the organization appears to prefer, but are not easily identified. However, these organizational values *must* be identified, because any plan that is inconsistent with existing organizational values is unlikely to succeed.

Philosophy of Operations

The organization's philosophy of operations includes assumptions about the way things work and the way in which decisions are made. Typical assumptions include attitudes about doing business with the government or working with labor unions, about paying bills, about dealing with clients, and about the need for the organization's services. Unless such assumptions are examined in terms of their current validity and relevance, the organization will assume that they are true and operate accordingly.

Organizational Culture

Managerial values, organizational values, and philosophy of operations are part of the organization's culture—the way things are done and the social surroundings in which the organization performs its work. The culture guides the organization's members in decision making, task behavior, and practically everything else they do in the organization. The evidence of culture is everywhere: in the organization's physical structure, in how the receptionist treats visitors, in the rites and rituals of the organization, in the ways that it portrays itself to the public, and so on.

The strategic planning team also considers its own culture as it affects the process of planning the organization's future.

Stakeholder Analysis

The values scan includes an analysis of those who will be impacted by the organization's strategic plan. They must be identified, their concerns must be determined, and the impact of various future states on them must be considered. Stakeholders typically include: employees (including managers), clients or customers, suppliers, governments, unions, creditors, owners, and shareholders.

The values scan is a difficult and critical part of the planning process. However, without it, differences in values, philosophy, and assumptions could surface continually and block forward movement.

PHASE THREE: MISSION FORMULATION

Pfeiffer, Goodstein, and Nolan stress the importance of the organizational mission—a clear statement of what business(es) the organization is in, the function that the organization is attempting to fulfill. In formulating its mission, an organization must answer three questions: (a) *what* function does the organization perform?, (b) for *whom?,* and (c) *how?* Often, organizations add a fourth question: *why* does this organization exist?

What

Most organizations answer the "what" question in terms of goods or services currently produced. This may prevent them from seeing new opportunities or responding to challenges. The alternative is to answer the question in terms of customer or client needs. Then the organization is more likely to develop new products or services to meet those needs and is less likely to decline or become obsolete. Successful organizations try to identify ways to meet the needs of the public and include those considerations in their mission formulations.

Who

No organization can meet all the needs of all possible clients or customers. The mission formulation requires clear identification of what portion of the potential customer base is the organization's primary target. This is called *market segmentation.* Markets can be segmented in many ways: geographically, financially, ethnically, and so on.

How

Deciding how the organization will achieve its mission may involve a marketing strategy, such as being the low-cost producer or the technological leader. It may involve a distribution system, such as regional warehouses or evening classes in factories. It may involve a variety of processes through which the organization can deliver products or services to a defined consumer group.

Driving Forces

Another important factor in mission formulation is identifying and prioritizing the organization's driving forces. Tregoe and Zimmerman (1980) identify nine basic driving forces. These are:

1. ***Products or Services Offered.*** Commitment to a product or service, such as retail banking or corn-sugar refining. Strategy is limited to more of that product or service, done better.
2. ***Market Needs.*** Potential customers are surveyed continually to discover unfilled needs for goods and services, and products are developed to fill those needs.

3. ***Technology.*** The organization develops products and services based on the latest scientific breakthroughs.
4. ***Production Capability.*** Commitment is to keeping existing production capability utilized, e.g., to have hospital beds filled or to have aluminum ingots on the dock.
5. ***Method of Sale.*** The method of sale, such as door-to-door selling, direct mail, bonus programs, etc., directs strategy.
6. ***Method of Distribution.*** The method of distribution, such as regional warehouses, manufacturer's representatives, pipelines, etc., influences strategy.
7. ***Natural Resources.*** The organization is dependent on natural resources such as coal, timber, metals, or land.
8. ***Size and Growth.*** Goals regarding size and growth dictate efforts to achieve significant growth above current performance.
9. ***Profit/Return on Investment.*** High requirements about profit margins or return on investments influence decisions.

The strategic planning team prioritizes the driving forces from one to nine in order of their perceived importance. This consensual ranking enables the planning team to make difficult decisions more easily.

Mission Statement

The answers to the questions about "what," "who," "how" (and, frequently, "why"), and driving forces are the bases for the organization's mission statement. This brief statement identifies the basic business the organization is in and the distinctive products or services that make it different from its competitors. The mission statement should be understood by all members of the organization.

Developing a mission statement is a difficult and time-consuming task, but one that the planning group must complete before moving on. The mission statement provides an enormously valuable management tool to the organization.

Unit Mission Statements

The next step is for each *major unit* of the organization to develop its own mission statement. These statements should be more focused and more limited than that of the total organization, but they must be derived from the organizational statement.

PHASE FOUR: STRATEGIC BUSINESS MODELING

Strategic business modeling defines success in the context of the business(es) the organization wants to be in, how that success will be measured, and what will be done to achieve it, consistent with the mission statement. The planning team conceptualizes a

series of specific future scenarios. The process of strategic business modeling consists of four major elements:

1. Identifying the major lines of business (LOBs) or strategic profile that the organization will develop to fulfill its mission;
2. Establishing the critical success indicators (CSIs) that will enable the organization to track its progress;
3. Identifying the strategic thrusts, that is, those tasks that will be performed to bring the LOBs and CSIs into reality, with a timetable and the designation of the persons responsible for each thrust; and
4. Determining the culture required to support the desired LOBs, CSIs, and strategic thrusts.

Each of these four elements must be determined individually, carried through the next two phases (performance audit and gap analysis), and—if necessary—looped back and revised in the strategic business modeling phase before the planning team moves on to the next element.

The LOB analysis involves deciding the mix of products and/or services the organization will offer in the future. The LOB analyses allow an organization to change its product/service mix—to drop those that no longer meet market needs, that have become unprofitable, that require too much investment to maintain, etc.

As the organization conceptualizes its future, it must identify the specific means of measuring its progress toward that future—setting the CSIs for the organization. CSIs typically are a mix of hard financial figures such as sales, margins, and return on investment (ROI) and soft indices of success, such as opinions of customers about service, employee morale, and the like. Priorities need to be set for these CSIs to make certain that the most important indices of being "on track" have been established and will be monitored closely over time. A timetable for reaching particular levels for each of these indices also must be established.

The strategic thrusts are the directions that the planning team intends for the organization to take for its LOBs in order to achieve the CSIs. Strategic thrusts are *what* the team plans to do to reach its strategic goals. During strategic business modeling, the thrusts are determined without concern for *how* they will be accomplished. To illustrate the difference between LOBs, CSIs, and strategic thrusts, we can look at a bakery whose LOBs include fresh breads, boxed cookies, and frozen pastries. Its CSIs may include 12 percent profit and 20 percent growth. But its strategic thrusts might include expanding its territory into other states or acquiring delicatessen and restaurant trade.

Relative to element number four, determining the culture required to support the LOBs, CSIs, and strategic thrusts, two questions are important: (1) What common values do members of the organization need to share in order to achieve the desired future? and (2) What are the cultural specifications required to achieve success? After these requirements have been set, the degree to which such a culture is present or absent

in the organization is ascertained in the performance-audit phase of the planning process.

Considerations

Several considerations are critical to the success of this stage. First, the modeling must be congruent with and build on the identified values and mission of the organization. Second, the modeling must be done in a context of proactive futuring: the belief that, although no one can fully predict the future, it is possible to anticipate significant aspects of the future, to conceptualize a desired end state for the organization taking those anticipated aspects of the future into account, and to work proactively to make that desired future state occur. Within this context, the organization takes responsibility for its own future rather than assigning that responsibility to unseen external forces. Third, strategic business modeling involves a heavy emphasis on focused creativity, a free-flowing generation of ideas that involves many alternative options for the organization to consider.

The next steps of the planning process—performance audit and gap analysis—are intended to identify whether or not the organization has the necessary resources, because commitment alone is *not* sufficient to achieve success.

PHASE FIVE: PERFORMANCE AUDIT

This audit examines the *recent* performance of the organization in terms of the performance indices (e.g., growth, production, quality, service, profit, return on investment, cash flow) that have been identified in the strategic profile. Any data that can help the organization to better understand its present capabilities are included. These might include life cycles of products, employee productivity, scrap rate, inventory turnover, facilities, and management capability. The performance audit indicates the organization's capacity to move in the desired directions.

Competitor Analysis

The performance audit includes information about forces outside the organization that might impact the strategic business model. One of the most important is the competitor analysis, which profiles organizations in the same business or organizations aiming for the same clients.

One way to understand a competitor is to analyze the competitor's current position and strategy and the goals and assumptions of the competitor in planning its future. Data may include who is going into or out of business, the profitability of competitors, their market shares, their client loyalty, their images, and so on.

There are many sources of information about actual and potential competitors. These include materials such as advertising, annual reports, trade publications, governmental reports, and patent records. Electronic data bases provide information about other companies' output, employees, market share, facilities, etc. Other sources of

data include trade shows, help-wanted ads, customer surveys, distributors and suppliers, and “shopping” the competition.

Because the competitor analysis requires research, each member of the planning team is responsible for conducting an analysis of one to several competitors. This becomes an ongoing responsibility of all managers and key personnel in the organization.

SBU Analysis

Another major part of the performance audit is a strategic-business-unit (SBU) analysis. An SBU is a division, department, or product line—a budgeting or profit center within the organization (for example, the loan department in a bank). The analysis identifies which aspects of the business are losing money, how strengths can be reinforced and weaknesses eliminated, and so on. The managers or key personnel of two or more strategic business units may monitor the same competitor in regard to their areas of concern.

Other Data

Market research, examination of macro and micro economic trends, and studies of work-force availability are included in the performance-audit data, which considers both current and future trends.

Much of the data required are available in organizations that have good managementinformation systems, especially financial reporting systems. The organization may need to hire or reassign financial staff to research, validate, combine, analyze, and report the data. This can be a crunch point in terms of time, personnel, and expertise; however, the data are critical. As the planning process becomes part of organizational functioning, appropriate financial units within the organization may absorb much of this task.

PHASE SIX: GAP ANALYSIS

The gap analysis is a comparison of the strategic profile with the data generated during the performance audit. If there is a substantial discrepancy between the profile and the organization’s capacity to achieve it, the planning team *returns* to the strategic business modeling phase to rework the model until the gap is reduced.

Comparison and Modification

The ASP Model depicts an arrow running backward from the gap analysis to the strategic business-modeling phase. Every “gap” requires a re-evaluation of the applicable portion of the strategic business model, so several repetitions of this process may be necessary before the gaps are closed.

If the gap analysis reveals a substantial discrepancy between the performance audit and the strategic profile or the strategies identified for achieving it, the design or functioning of the organization may need to be examined. Something must be modified in order to close the gaps.

Another part of the gap analysis is the comparison of the strategic business model with the values scan and the mission statement, in order to ascertain that the things the organization is proposing to do are consistent with its culture.

PHASE SEVEN: CONTINGENCY PLANNING

As part of the performance audit and gap analysis, the planning team identifies the major opportunities of and threats to the organization as well as the indicators that these are likely to become realities. Such conditions will necessitate changes if they do occur. However, contingency planning is not based on high-probability assumptions.

Aside from universal concerns such as war and economic collapse, each type of business is subject to a specific set of contingencies. For example, a producer of building materials would consider housing starts, interest rates, and so on.

The planning team develops plans based on factors that could affect the organization, including several options for each contingency. For example, one contingency is the possible loss of the president of the organization. Options include succession planning, "key-person" insurance, and arranging for an outside expert to fill the gap during the crisis.

Key Indicators and "Trigger Points"

The contingency-planning process also identifies a number of indicators that trigger awareness of the need to re-examine a current strategy. A "trigger point" could be a fire in the warehouse, a supplier's failure to renew a contract, or a competitor's new product. Trigger points also can be positive, such as an unexpected demand for a new product or service.

Should a trigger point be reached, two levels of response are generated:

1. ***Higher-level monitoring.*** No action is taken; however, the *possibility* of a need to change assumptions is noted, and indicators are watched.
2. ***Action.*** The decision is made that conditions are different, and a contingency plan is implemented or some aspect of a strategy is modified.

PHASE EIGHT: INTEGRATING ACTION PLANS

Once the gap between the strategic business model and organizational capacity is a manageable one, planning is delegated to functional units of the organization, each of which develops a detailed action plan with a budget and a clear-cut timetable. In the typical organization, there would be a financial plan, a product plan, a marketing plan, a human resources plan, a capital-equipment plan, and so on. This is done *before* the

overall budget decisions for the organization are made, so that the final plans can be integrated into the budget considerations. Line managers generally serve as the liaisons between the strategic planning team and the functional units.

Each unit's action plan is checked against the organizational values scan and mission statement so that all plans are developed with the same overall objectives and assumptions.

Agreement To Share Resources

Each functional unit's action plan must be understood and agreed to by the other functional managers in the organization, usually as part of the annual budgeting process. In reality, once plans are made, each part of the organization may begin to compete for limited resources in order to attain its objectives. It is imperative that all managers understand the impact of such competition and agree to the planned allocation of resources.

Putting It All Together

The planning team identifies the gaps in and between the combined action plans, how they can be closed, and what their impact might be on the strategic business model. Integrating action plans involves putting together all the pieces in order to determine how the overall plan will work and where the potential trouble spots are. This integration is a major part of the budgeting process.

PHASE NINE: IMPLEMENTATION

The implementation of the strategic plan involves the initiation of the functional-level action plans. This may include construction, management training, increased research, or new sales procedures. Implementation is the "handing off" of the strategic plan to the functional managers.

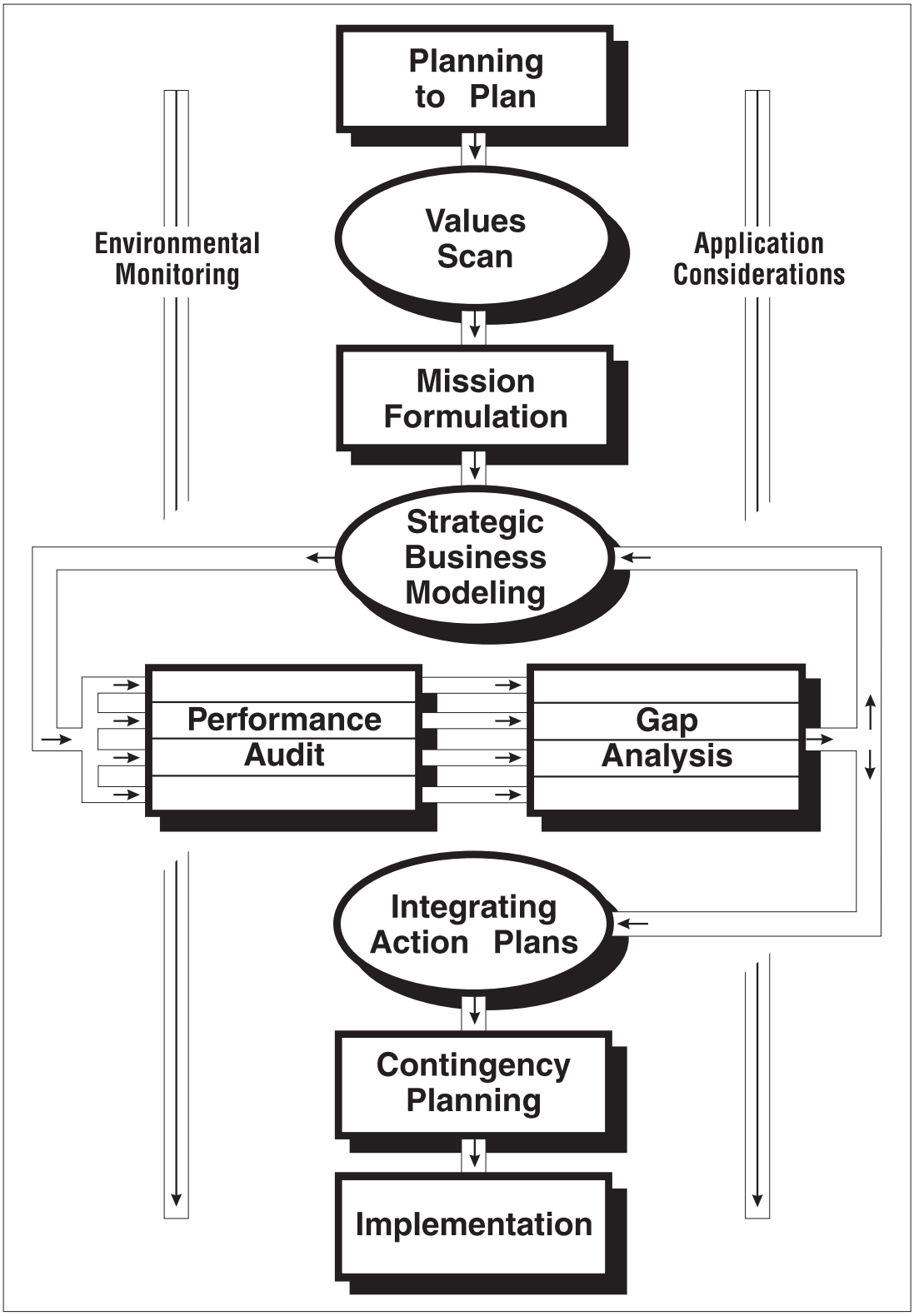
REFERENCES

Pfeiffer, J.W., Goodstein, L.D., & Nolan, T.M. (1986). *Applied strategic planning: A how to do it guide.* San Diego, CA: Pfeiffer & Company

Tregoe, B.B., & Zimmerman, J.W. (1980). *Top management strategy: What it is and how to make it work.* New York: Simon and Schuster.

SOURCE

Pfeiffer, J.W., Goodstein, L.D., & Nolan, T.M. (1985). Applied strategic planning: An overview. San Diego, CA: Pfeiffer & Company



Pfeiffer, Goodstein, & Nolan's Applied Strategic Planning Model

ATTRACTION-SELECTION-ATTRITION

Most human resource development (HRD) literature suggests that the ways in which organizations are structured, the kinds of technologies they utilize, the ways that they treat employees, and the natures of their external environments *create* their employee performance, organizational climate, organizational effectiveness, and so on. In other words, *organizational behavior is an outcome of the organizational context.* This theory assumes that situations determine behavior and that if changes (e.g., in the organizational climate) are desired, manipulation of organizational attributes will create the desired changes in organizational behavior.

Benjamin Schneider (1987) asserts that this may not be the case. Contrary to prevailing beliefs, Schneider believes that the *people* in organizations, not the *situations,* create the ways in which organizations behave. Schneider views organizations as settings for patterned human activity and believes that organizational contexts and behaviors are *the result of the kinds of people in the organization.*

THE ATTRACTION-SELECTION-ATTRITION (ASA) CYCLE

Attraction

Schneider argues that people are not randomly selected into organizational settings; instead, people are *attracted* to and self-select particular organizational settings as functions of their own particular interests and personalities. The vocational-choice literature clearly supports the notion that people tend to choose occupations in order to implement their self-concepts (Super, 1951), and because they believe that their own particular interests and personalities will fit into a particular occupational environment (Holland, 1985). Similarly, Tom (1971) documented that people prefer to work for organizations with characteristics that they perceive as similar to their own. Consequently, *similar types of people are drawn to similar types of occupational and organizational environments.* Similar types of people prefer to do similar kinds of things and are prone to similar kinds of behavior.

Selection

Attraction processes are only one element in the ASA cycle. Organizations are *goal-driven* systems (Katz and Kahn, 1978) and, to varying degrees, develop core expectations regarding the proper behavior, attitudes, values, and motives that employees should demonstrate. Through formal and informal *selection processes,* organizations choose who will be permitted entry. The people who choose whether or not to extend offers of "membership" into an organization are products of that organization's culture; predictably, they admit only those who fulfill a need and who are perceived as compatible with organizational expectations. Schneider (1987)

hypothesized that, if similar types of people are attracted to certain organizational settings, selection processes that favor compatible types will further restrict the range of individual differences among people selected. The result is increased similarity of people entering the organization.

Attrition

The predisposition toward an occupation typically is followed by one's choice of and selection by an organization. Once the person and the organization have chosen each other, a period of adaptation and adjustment begins. Adaptation and adjustment can be viewed as an attempt on both ends to test the suitability or "fit" of the match (Lofquist & Dawis, 1969). *Attrition* means that people who find that they do not fit into an environment tend to leave. From Schneider's perspective, attrition processes are significant because the departure of the "square pegs" leaves an organization whose remaining members are even more similar in behavior, attitudes, values, and motives. Herzog (1990) has documented that, over the long term, organizational members tend to grow more alike in terms of certain personality characteristics. The critical point for Schneider is that not only do those remaining become similar to one another, but they behave similarly because they are *similar types of people,* not because of environmental conditions.

IMPLICATIONS FOR ORGANIZATIONS

Adaptation, change, and renewal are crucial issues for all organizations. Organizations must adapt to changing environments in order to survive in a dynamic and highly competitive marketplace. The fundamental implication of an ASA conceptualization relates to an organization's ability to recognize and to respond to changing operating environments. For example, if organizational members—especially decision makers—are nonattentive to environmental conditions, the organization is not likely to survive and to prosper over the long term. The predicament is compounded when organizations actively recruit and select what Argyris (1957) labeled "right types." The recruitment and selection of people with new and innovative ideas can keep the organization from stagnating, provided the new "right types" share some primary and secondary characteristics with the old "right types." The new people must have something in common with the organizational culture because, otherwise, the old "right types" will force them out.

If organizational structure and processes are products of the incumbent members of organizational systems, attempts to adapt, to change, and to renew by modifying organizational structures and processes probably will be ineffective unless the incumbents also change. In other words, behavioral change precedes structure; processes and behavior are not likely to change until the organizational membership becomes more diverse.

REFERENCES

Argyris, C. (1957). Some problems in conceptualizing organizational climate: A case study of a bank. *Administrative Science Quarterly, 2,* 501-520.

Herzog, K.W. (1990). *The relationship between personal attributes and long-term organizational membership.* Unpublished doctoral dissertation, United States International University, San Diego, CA.

Holland, J.L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

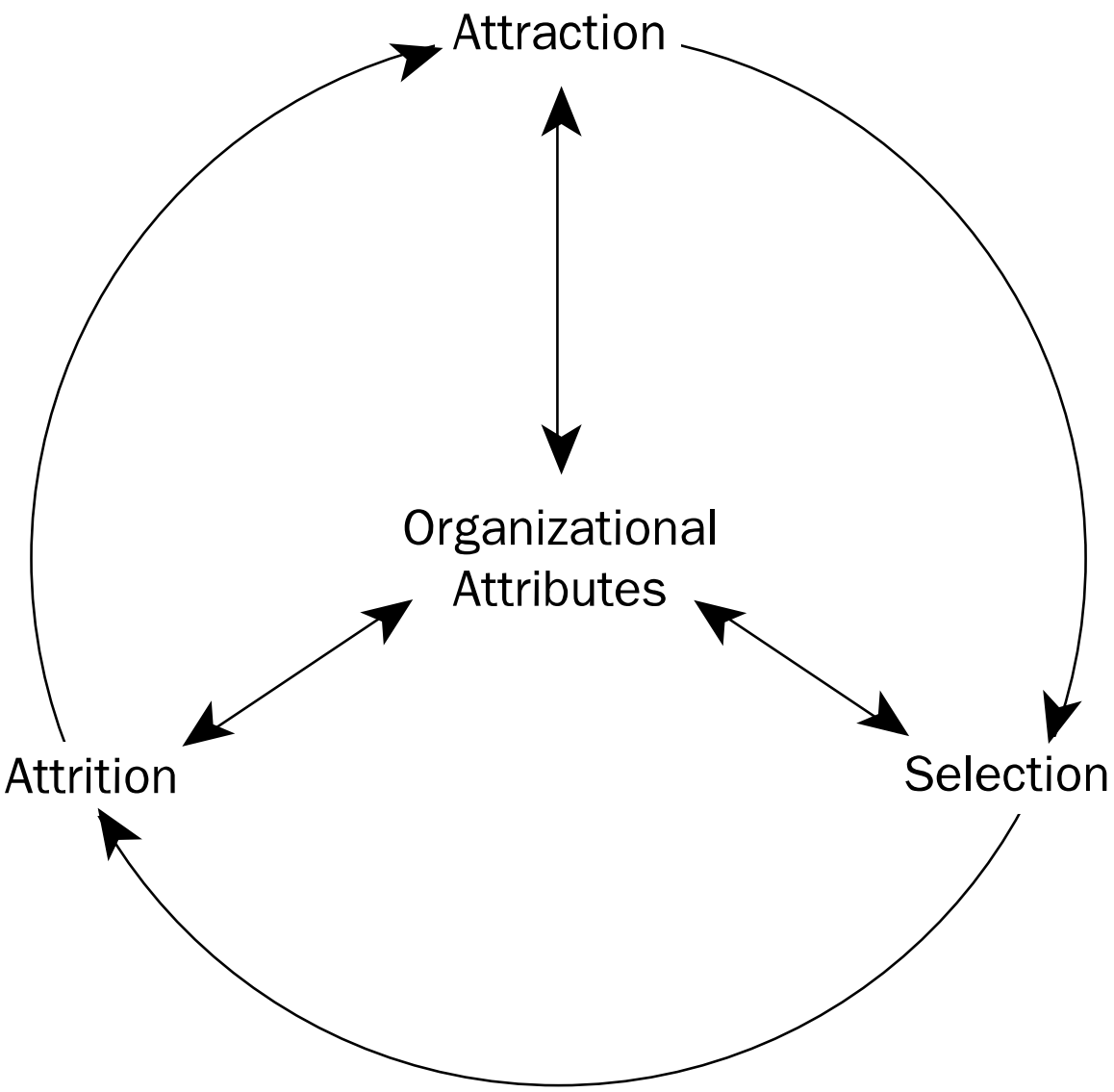
Katz, D., & Kahn, R.L. (1978). *The social psychology of organizations* (2nd ed.). New York: John Wiley.

Lofquist, L.H., & Dawis, R.V. (1969). *Adjustment to work.* New York: Appleton-Century-Crofts.

Schneider, B. (1987). The people make the place. *Personnel Psychology, 40*(3), 437-453.

Super, D.E. (1951). Vocational adjustment: Implementing a self concept. *Occupations, 30,* 88-92.

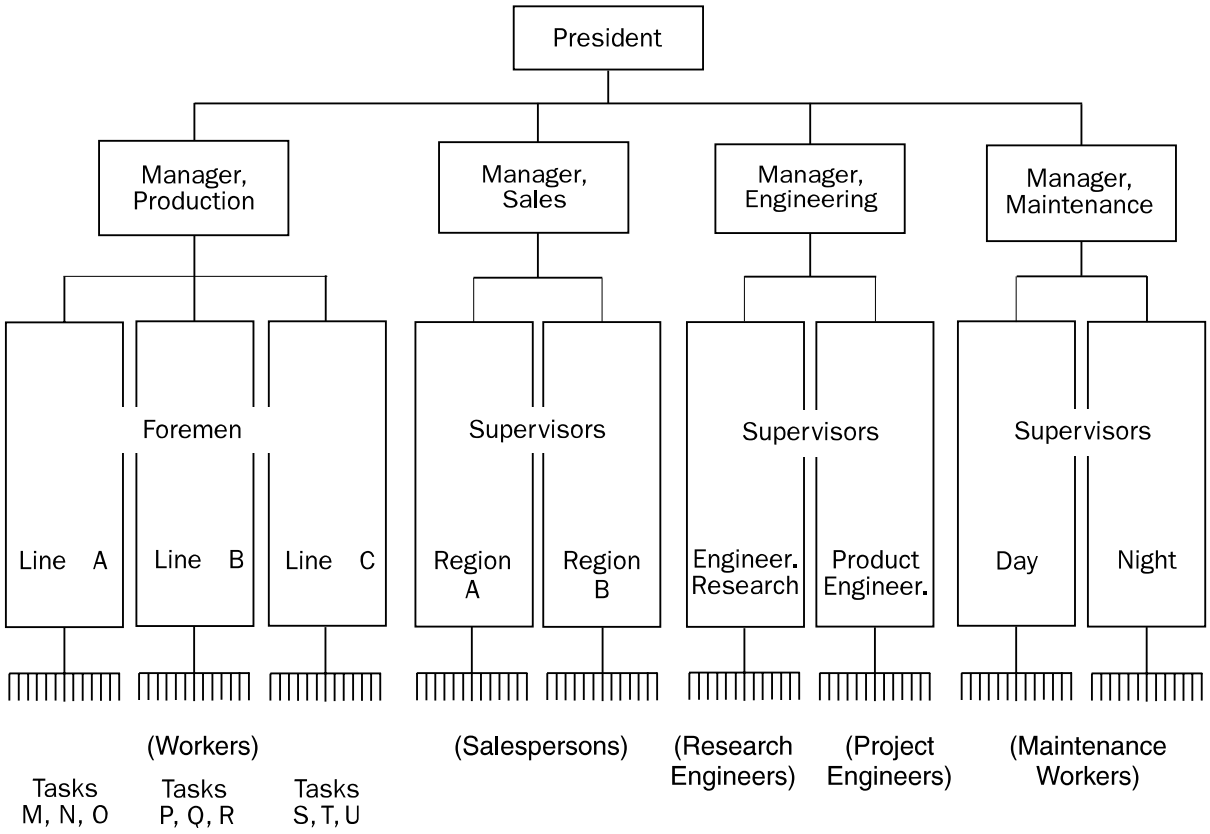
Tom, V.R. (1971). The role of personality and organizational images in the recruiting process. *Organizational Behavior and Human Performance, 6,* 573-592.



Schneider's ASA Cycle

BUREAUCRACY

Max Weber (1947) advanced the concept of *bureaucracy* by codifying (describing) and by slightly modifying this ancient system of organization. He began with a complex, fairly efficient, and very stable bureaucracy that had been the basis of Chinese civilization for over 3,000 years. Weber examined and analyzed the Chinese bureaucracy and other bureaucratic systems, such as the Catholic church and the Prussian army, that seemed to be effective in terms of organizational survival and goal attainment. Weber's analysis of the bureaucratic form, shown in the figure below, was the first clear, detailed statement of organizational structure.



Weber's Basic Bureaucratic Structure

MODIFICATIONS TO TRADITIONAL BUREAUCRACY

Weber suggested two modifications to the traditional bureaucratic structure:

1. ***Authority should be based on a rational-legal system rather than on tradition (such as hereditary rule) or force.*** In Weber's day, many (if not most)

organizations had controls over workers that seem unbelievable today. These included not only ten-, twelve-, or fourteen-hour working days, but also control over how employees spent their free time and a norm of absolute obedience to superiors, however irrational or nonwork-related superiors' orders might be. Weber's concept of rational-legal authority prescribes clearly defined limits over what may and may not be required of workers.

2. ***Organizations should be arranged as hierarchies of offices, not of people.*** That is, each "office" should carry specified duties along with the legal authority to carry out those duties—no more and no less. The effect of this modification was twofold. First, the rational and legal basis of authority was emphasized, and control over workers was limited to control over work-related behavior only. Second, the activities of the manager (duties, responsibilities, and so on) were defined clearly, thus making it possible to select people for specific jobs on the basis of competence and skills.

In keeping with Weber's new system of bureaucracy, each position is defined by specific tasks, duties, authority, and responsibilities. Requirements for a position (such as certain skills) are specified, and any person with the necessary qualifications may be hired to fill the position. This is how most job descriptions are written and how most job openings are advertised and filled today.

Although some may react negatively to the term "bureaucracy," bureaucracy itself was a significant invention. Weber (1946) stated that the reason why bureaucratic organization succeeded was its "technical superiority" to other forms of organization. He defined that technical superiority, in part, as "precision," "stability," "stringency of discipline," "reliability," and formal capability "of application to all kinds of administrative tasks" (p. 214).

A Humane Alternative to Autocracy

In comparing bureaucracy to the autocratic forms of government and management that preceded it, Weber (1946) called the progress of bureaucratization "a parallel phenomenon of democracy" (p. 225). He added, "This results from the characteristic principle of bureaucracy: the abstract regularity of the execution of authority, which is a result of the demand for 'equality before the law' in the personal and functional sense" (p. 224). He pointed out that bureaucracy had replaced the arbitrary rule of the "chief" over the subordinate with "the establishment of a regular disciplinary procedure" (p. 242). Historically, the spread of bureaucracy replaced "structures of domination," such as patriarchialism, feudalism, and charismatic authority, "which had no rational character" (p. 244). Thus, bureaucracy had two great advantages: (a) it was the most efficient and effective form of organization and (b) it was the most humane.

Preparing Organizations To Face the Future

In essence, Weber made organizations rational, just as Taylor (1911) made specific tasks rational. Although many organizations had endured under the old system for centuries, the old organizational system soon would be obsolete. Through his detailed and accurate observations of the traditional organizational system, Weber was able to modify the system and to enable organizations to survive in an increasingly complex and technologically sophisticated environment.

REFERENCES

Taylor, F.W. (1911). *Scientific management.* New York: Harper.

Weber, M. (1946). *From Max Weber: Essays in sociology* (H.H. Gerth & C.W. Mills, Eds. & Trans.). New York: Oxford University Press.

Weber, M. (1947). *The theory of social and economic organizations* (T. Parsons, Ed.; A.M. Henderson & T. Parsons, Trans.). New York: The Free Press.

SOURCE

Sashkin, M. (1981). An overview of ten management and organizational theorists. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1981 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company

A CAUSAL MODEL OF ORGANIZATIONAL PERFORMANCE

Organizational models that do little more than describe or depict are frustrating, both from the perspective of research about organizations and from that of consultation to organizational clients. Burke and Litwin (1989) realized the need for a model that predicts behavior and performance consequences, one that deals with *cause* (organizational conditions) and *effect* (resultant performance). Their model is based on sound research, theory, and organizational consulting experience.

Some organizational models that are largely descriptive do stipulate certain boundaries. Weisbord (1976), for example, states that the role of the leadership box in his six-box model is to coordinate the remaining five. The Nadler-Tushman (1977) model is one of congruence. These authors state that for effectiveness, the various boxes comprising their model should be congruent with one another; for example, organizational arrangements (structure) should be congruent with organizational strategy. Nevertheless, most, if not all, of these models contain no causal features.

Contingency models of organizations (Lawrence & Lorsch, 1969; Burns & Stalker, 1961) do have certain causal aspects. Organizational effectiveness is, in part, contingent on the degree of match between the organization's external environment (whether static or dynamic) and the organization's internal structure (either mechanistic or organic). But contingency models tend to present too many contingencies and few methods for sorting out their interrelationships.

In contrast, the Burke-Litwin model is more than merely descriptive and congruent; it serves as a guide not only for organizational diagnosis but also for planned, managed, organizational change.

BACKGROUND: CLIMATE AND CULTURE

Climate

The original thinking behind the model came from George Litwin and others during the 1960s. In 1967, the Harvard Business School sponsored a conference on organizational climate, and the results of this conference were published in two books (Litwin & Stringer, 1968; Tagiuri & Litwin, 1968). The concept of organizational climate that emerged was that of a psychological state strongly affected by organizational conditions, such as systems, structure, and managerial behavior. Tagiuri and Litwin (1968) emphasized that there could be no universal set of dimensions or properties for organizational climate. They argued that one could describe climate along different dimensions depending on what kind of organization was being studied and what aspects

of human behavior were involved. They described climate as a molar, synthetic, or changeable construct. Further, the kind of climate construct they described was relatively malleable; it could be modified by managerial behavior and by systems and be strongly influenced by more enduring group norms and values.

This early research and theory development regarding organizational climate clearly linked psychological and organizational variables in a cause-effect model that was empirically testable. Using the model, Litwin and Stringer were able to predict and to control the motivational and performance consequences of various organizational climates established in their research experiment.

Culture

The concept of organizational culture is drawn from anthropology and is used to describe the relatively enduring set of values and norms that underlie a social system. These underlying values and norms may not be entirely conscious. Rather, they describe a "meaning system" that allows members of a social system to attribute meaning and value to the external and internal events that they experience. Such underlying values and meaning systems change only as continued culture is applied to generations of individuals in that social system.

The distinction between climate and culture must be very explicit because the Burke-Litwin model attempts to describe both climate and culture in terms of their interactions with other organizational variables. Thus, the model builds on earlier research and theory with regard to predicting motivation and performance effects. In addition, the variables that influence and are influenced by climate need to be distinguished from those influenced by culture. Therefore, there are two distinct sets of organizational dynamics. One set primarily is associated with the transactional level of human behavior or the everyday interactions and exchanges that create the climate. The second set of dynamics is concerned with processes of human transformation (sudden "leaps" in behavior) that are required for genuine change in an organization's culture. Efforts to distinguish transactional and transformational dynamics in organizations have been influenced by the writings of Burns (1978) and by experiments in modern organizations.

THE MODEL

Burke and Litwin's (1989) model has been refined through a series of studies directed by Burke (Bernstein & Burke, 1989; Michela, Boni, Manderlink, Bernstein, O'Malley, Burke, & Schechter, 1988). Recent collaboration has led to the current form of the model, which attempts the following:

1. To specify the interrelationships of organizational variables; and
2. To distinguish transformational and transactional dynamics in organizational behavior and change.

The figure that follows summarizes the model. Although the model is complex, it is an oversimplification in its two-dimensional form; a hologram would be a better representation.

In accordance with accepted thinking about organizations from general systems theory (Katz & Kahn, 1978), the external-environment box represents the input, and the individual- and organizational-performance box represents the output. Feedback loops go in both directions. The remaining boxes of the model represent the throughput aspect of general systems theory.

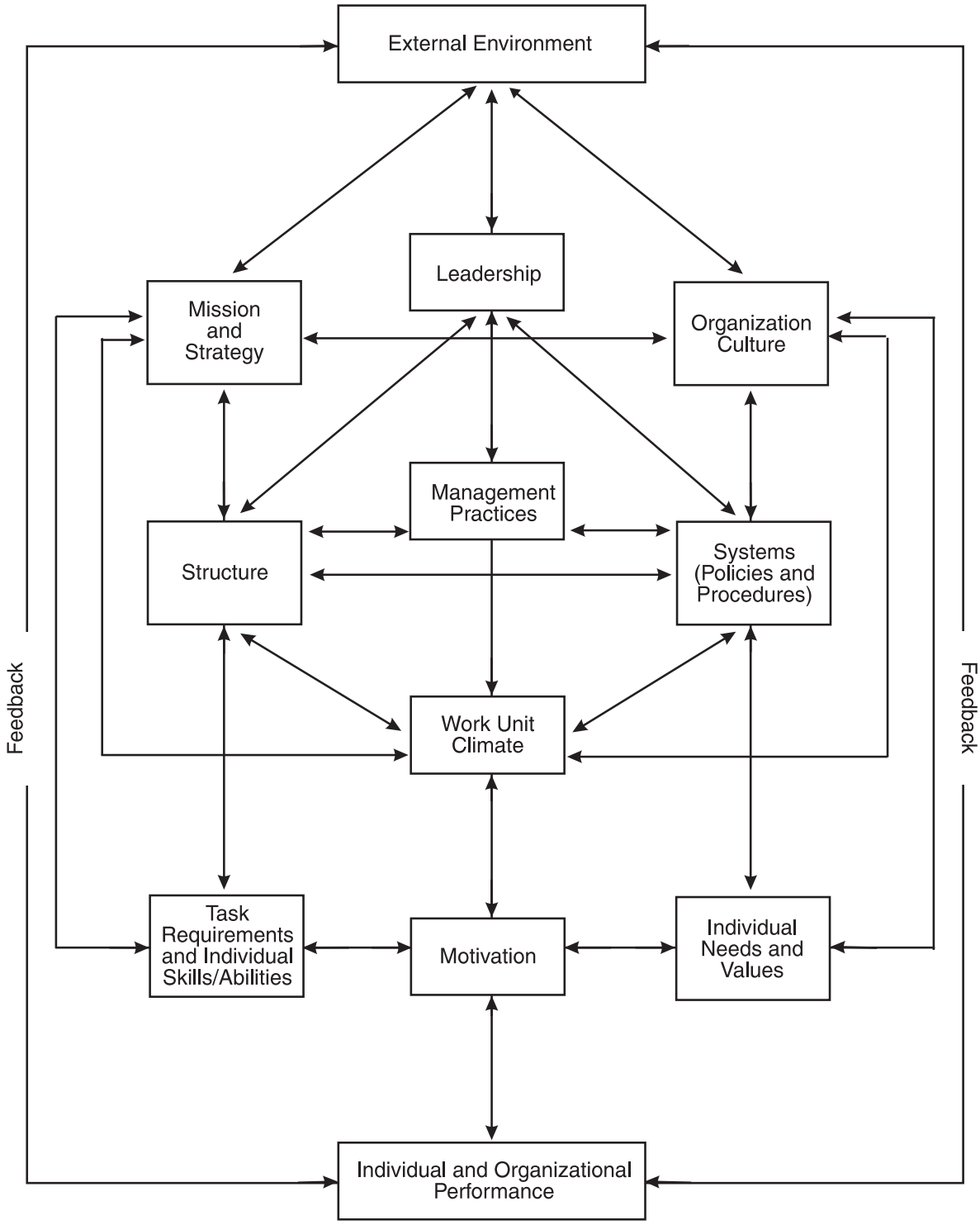
Arrows in both directions convey the open-systems principle that change in one factor eventually will have an impact on the others. If the model could be diagramed so that the arrows were circular (as they would be in a hologram), reality could be represented more accurately. Yet this is a causal model. For example, although culture and systems affect one another, culture affects systems more strongly. The model could be displayed differently; external environment could be on the left and performance on the right, with all throughput boxes in between. The model also could be inverted with performance on the top and external environment on the bottom. However, the model as pictured makes a statement about organizational change: organizational change stems more from environmental impact than from any other factor. Moreover, with respect to organizational change, the variables of strategy, leadership, and culture have more "weight" than the variables of structure, management practices, and systems. In other words, having leaders communicate a new strategy is not sufficient for effective change. Cultural change must be planned as well as aligned with strategy and leader behavior. How the model is displayed does not dictate where change could start; however, it does indicate the weighting of change dynamics. The reader can think of the model in terms of gravity, with the push toward performance being in the weighted order displayed in the figure on the next page.

The model depicts the following:

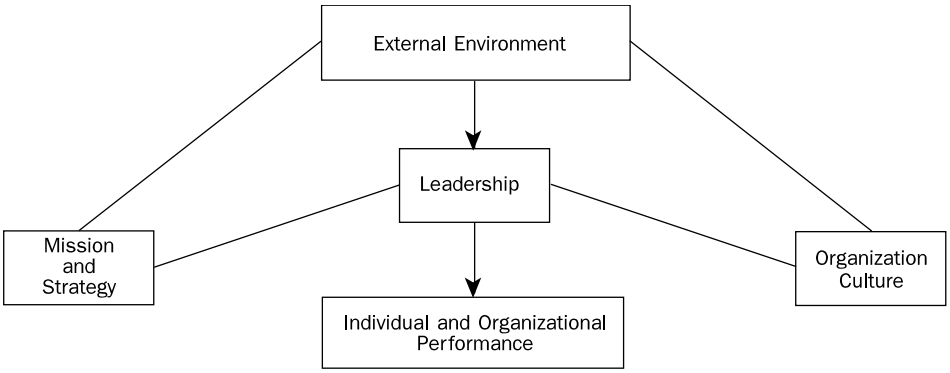
- The primary variables that need to be considered in any attempt to predict and explain the total behavioral output of an organization;
- The most important interactions among these variables; and
- How the variables affect change.

TRANSFORMATIONAL AND TRANSACTIONAL DYNAMICS

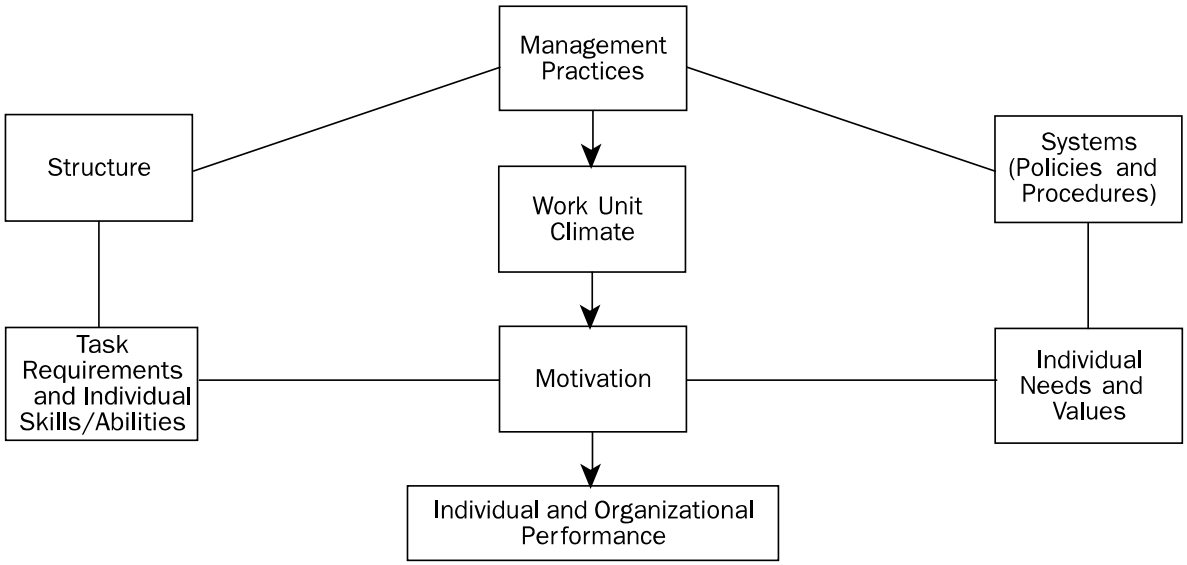
The concept of transformational change in organizations is suggested in the writings of Bass (1985), Burke (1986), Burns (1978), McClelland (1975), and Tichy and Devanna (1986). The first figure on page 28 displays the *transformational variables*, which appear in the upper half of the model. *Transformational* refers to areas in which alteration probably is caused by interaction with environmental forces (both within and without) and which require entirely new sets of behavior on the part of organizational members.



The Burke-Litwin Model of Individual and Organizational Performance



The Transformational Factors



The Transactional Factors

The *transactional variables,* those in the lower half of the model, are depicted in the second figure on page 28. These variables are very similar to those originally isolated by Litwin (1968) and later by Michela et al. (1988). They are transactional in that alteration occurs primarily via relatively short-term reciprocity among people and groups. In other words, "You do this for me and I'll do that for you."

Each category or box in the model can be described as follows:

- ***External Environment:*** Any outside condition or situation that influences the performance of the organization. These conditions include marketplaces, world financial conditions, political/governmental circumstances, and so on.
- ***Mission and Strategy:*** What employees believe is the central purpose of the organization and how the organization intends to achieve that purpose over time.
- ***Leadership:*** Executive behavior that encourages others to take needed actions. For purposes of data gathering, this box includes perceptions of executive practices and values.
- ***Culture:*** "The way we do things around here." Culture is the collection of overt and covert rules, values, and principles that guide organizational behavior and that have been strongly influenced by history, custom, and practice.
- ***Structure:*** The arrangement of functions and people into specific areas and levels of responsibility, decision-making authority, and relationships. Structure assures effective implementation of the organization's mission and strategy.
- ***Management Practices:*** What managers do in the normal course of events to use human and material resources to carry out the organization's strategy.
- ***Systems:*** Standardized policies and mechanisms that facilitate work. Systems primarily manifest themselves in the organization's reward systems and in control systems such as goal and budget development and human resource allocation.
- ***Climate:*** The collective current impressions, expectations, and feelings of the members of local work units. These, in turn, affect members' relations with supervisors, with one another, and with other units.
- ***Task Requirements and Individual Skills/Abilities:*** The behavior required for task effectiveness, including specific skills and knowledge required for people to accomplish the work assigned and for which they feel directly responsible. This box concerns what is often referred to as job-person match.
- ***Individual Needs and Values:*** The specific psychological factors that provide desire and worth for individual actions or thoughts.
- ***Motivation:*** Aroused behavioral tendencies to move toward goals, to take needed action, and to persist until satisfaction is attained. This is the net resultant motivation; that is, the resultant net energy generated by the sum of achievement, power, affection, discovery, and other important human motives.
- ***Individual and Organizational Performance:*** The outcomes or results, with indicators of effort and achievement. Such indicators might include productivity, customer or staff satisfaction, profit, and service quality.

Climate Results from Transactions; Cultural Change Requires Transformation

Organizational *climate*—as the concept originally evolved in the 1960s at the Harvard Business School and other centers of behavioral research—was a description of the immediate, short-term impact of the organizational environment on individual and group behavior. Of course, climate has long-term consequences, but these consequences develop as a result of a series of continuing, day-to-day interactions and exchanges (transactions). The idea of climate evolved from the efforts of Litwin and others to describe the relatively fluid qualities of human behavior. Managers could establish a particular climate with a whole variety of consequences for motivation and organized performance.

In the causal model, day-to-day climate is a result of transactions related to issues such as:

- ***Sense of direction:*** The effect of mission clarity or lack thereof;
- ***Role and responsibility:*** The effect of structure, reinforced by managerial practice;
- ***Standards and commitment:*** The effect of managerial practice, reinforced by culture;
- ***Fairness of rewards:*** The effect of systems, reinforced by managerial practice;
- ***Focus on customer versus internal pressures or standards of excellence:*** The effect of culture, reinforced by other variables.

In contrast, organizational *culture* is those underlying values and systems that are difficult to manage, to alter, and even to be realized completely (Schein, 1985). Culture is not used to describe another way of understanding the short-term dynamics of the organization. Rather, it provides a theoretical framework for delving into that which is continuing and relatively permanent. Change can be arranged or may come about as a result of uncontrolled outside forces but will involve substantial upheaval in all transactional-level systems and will take time.

Instant change in culture seems to be a contradiction in terms. By definition, those things that can be changed quickly are not the underlying reward systems but the *behaviors* that are attached to the meaning systems. It is relatively easy to alter superficial human behavior; it is quite difficult to alter something unconscious that is hidden in symbols and mythology and that acts as the fabric that helps an organization to remain whole and functional.

To change something so deeply imbedded in organizational life requires transformational experiences and events. New meaning is given to one's perceptions by such life-changing circumstances. Cataclysmic environmental changes shaped human evolution and produced the kind of internalized culture that people experience. Similarly, drastic environmental changes have shaped or will shape the culture of organizations such as Chrysler and General Motors.

Culture has enormous inertia. It takes drastic circumstances for leaders to question long-held assumptions. Walter Wriston, former chairman of Citicorp, is reported to have said, "You know when you change; when you run headlong into a brick wall, that's when you change!" Transformational experiences and events often result from environmental change, but other events may be critical—for example, the appointment of a new leader. Such transformational processes can provide the basis for "sudden leaps" in organizational behavior and performance because they provide new meaning to events such as cultural change and its interactions with other variables.

Using the Model: Data Gathering and Analysis

Distinguishing transformational and transactional thinking about organizations has implications for planning organizational change. Unless one is conducting an overall organizational diagnosis, preliminary interviews will result in enough information to construct a fairly targeted survey. Survey targets would be determined from the interviews and, most likely, would be focused on either transformational or transactional issues. Transformational issues call for a survey that probes mission and strategy, leadership, culture, and performance. Transactional issues require a focus on structure, systems, management practices, climate, and performance. Other transactional probes might involve motivation, including task requirements (job-person match) and individual needs and values. For example, parts or all of "The Job Diagnostic Survey" (Hackman & Oldham, 1980) might be appropriate.

A consultant who is helping to manage change would conduct preliminary interviews with fifteen to thirty representative individuals in the organization. If a summary of these interviews revealed that significant organizational change were needed, additional data would be collected related to the top or transformational part of the model illustration. Note that in major organizational change, transformational variables represent the primary levers (those areas in which change must be focused). The following examples represent transformational change (concentrated at the top of the model, as illustrated in the second figure):

1. An acquisition in which the acquired organization's culture, leadership, and business strategy are dramatically different from those of the acquiring organization (even if both organizations are in the same industry), thereby necessitating a new, merged organization;
2. A Federal agency in which the mission has been modified and the structure and leadership changed significantly, yet the culture remains in the past; and
3. A high-tech firm whose leadership has changed recently and is perceived negatively, whose strategy is unclear, and whose internal politics have moved from minimal (before) to predominant (after). The hue and cry here is "We have no direction from our leaders and no culture to guide our behavior in the meantime." For an organization in which the presenting problem is more a fine-

tuning or improving process, the second layer of the model (shown in the third figure) serves as the focal point.

Examples include changes in the organization's structure; modification of the reward system; management development (perhaps in the form of a program that concentrates on behavioral practices); or the administration of a climate survey to measure job stratification, job clarity, teamwork, and so on.

British Airways is a good example of an organization in which almost all of the model is used, providing a framework for executives and managers to understand the massive change they are attempting to manage. British Airways became a private corporation in February of 1987; changing from a government agency to a market-driven, customer-focused business enterprise is a significant change. All boxes in the model have been, and still are being, affected. Data have been gathered based on most of the boxes and summarized in a feedback report for each executive and manager. This feedback, organized according to the model, helps the executive or manager to understand which of the boxes within his or her domain need attention.

It also is useful to consider the model in a vertical manner. For example, Bernstein and Burke (1989) examined the causal chain of culture, management practices, and climate in a large manufacturing organization. In this case, feedback to executives showed how and to what degree cultural variables influenced management practices and, in turn, work-unit climate (the dependent variable).

To summarize, considering the model in horizontal terms emphasizes that organizational change is either transformational—significant if not fundamental change—or transactional—fine-tuning and improving the organization rather than change that is significant in scope. Considering the model from a vertical perspective entails hypothesizing causal effects and assuming that the "weight" of change is top-down; that is, the heaviest or most influential organizational dimensions for change are external environment, first and foremost, and then mission-strategy, leadership, and culture.

It is interesting to note that executives and managers typically concern themselves with the left side of the model—mission and strategy, structure, task requirements and individual skills/abilities. In contrast, behavioral scientists are more likely to be concerned with the right side and middle of the model—leadership, culture, systems (especially rewards), management practices, climate, individual needs and values, and motivation. One should be concerned with the entire model and with a more effective integration of purpose and practice.

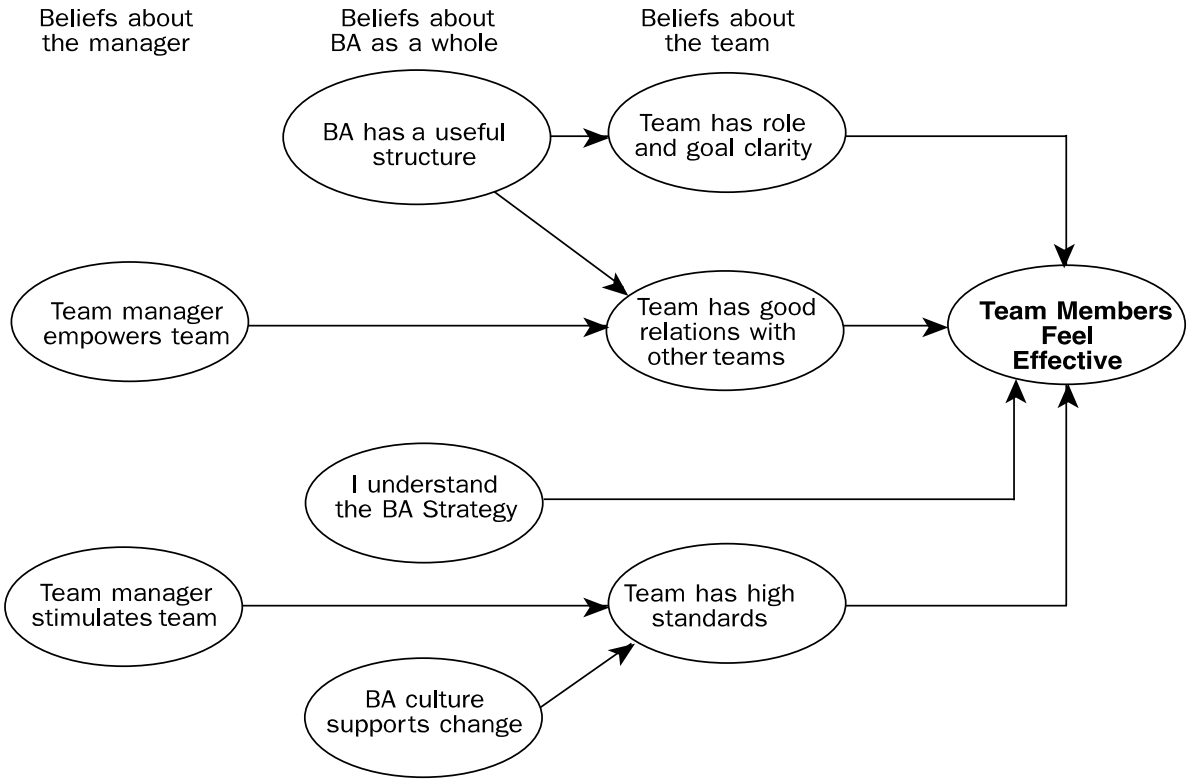
Preliminary Support for the Model's Validity

One way to measure causal predictions is to stay with perceptions and beliefs, that is, how managers' beliefs about mission and strategy, for example, relate to and possibly predict their own perceptions and their subordinates' perceptions of work-unit climate. In the British Airways example, one of the performance indices used was perceived team effectiveness. In research designed and conducted by William M. Bernstein, data

were collected from BA managers regarding their beliefs and perceptions about (l) team-manager practices, for example, degree of empowering behavior toward subordinates; (2) the usefulness of BA's structure; (3) the clarity of BA's strategy; (4) the extent to which BA's culture supports change; and (5) the team's climate, for example, goal and role clarity. The data categorized according to just these five boxes from the model explained 54 percent of the variance in rating of team effectiveness. The figure on the next page illustrates these relationships.

CONCLUSIONS

Data do not always support precisely the causal chain depicted in the model. For example, occasionally, perceptions regarding strategy or structure explain more variance in ratings of climate or some index of performance than does the variable of management practices, which usually is a heavy predictor. These occasions are when the organization is in the midst of a change in strategy, a change in structure, or both. It also may be that national differences would affect the causal chain in ways not quite as the model would predict. In the United Kingdom, for example, beliefs about "the team" and what constitutes satisfaction may not be the same as those in America. When given the opportunity to complain or criticize, the British seem to attribute their feelings of dissatisfaction to more distant factors, such as the culture or the structure, than to factors close to home, such as one's teammates. Americans, on the other hand, are just as likely to criticize their teammates as they are to complain about the inadequate organizational structure. Finding exceptions to the causal implications of the model does not necessarily detract from its usefulness. As a guide to what to look for and how to manage large-scale organizational change, the model is invaluable. Like any other model, however, it cannot determine exclusively what to diagnose or how to handle organizational change. It simply is one way of conceptualizing and helping organizations take another step forward, making the process more concrete, more testable, and more useful.



Beliefs Associated with Team Members' Feelings of Effectiveness

REFERENCES

Bass, B.M. (1985). *Leadership and performance beyond expectations.* New York: Free Press.

Bernstein, W.M., & Burke, W.W. (in press). Modeling organizational meaning systems. In R.W. Woodman and W.A. Pasmore (Eds.), *Research in organizational change and development* (Vol. 3). Greenwich, CT: JAI Press.

Burke, W.W. (1986). Leadership as empowering others. In S. Srivastva and Associates, *Executive power: How executives influence people and organizations.* San Francisco: Jossey-Bass.

Burns, J.M. (1978). *Leadership.* New York: Harper & Row.

Burns, T., & Stalker, G. (1961). *The management of innovation.* London: Tavistock.

Hackman, J.R., & Oldham, G.R. (1980). *Work redesign.* Reading, MA: Addison-Wesley.

Katz, D., & Kahn, R.L. (1978). *The social psychology of organizations* (2nd ed.). New York: John Wiley.

Lawrence, P.R., & Lorsch, J.W. (1969). *Developing organizations: Diagnosis and action.* Reading, MA: Addison-Wesley.

Litwin, G.H., & Stringer, R.A. (1968). *Motivation and organizational climate*. Boston, MA: Harvard Business School.

McClelland, D.C. (1975). *Power: The inner experience.* New York: Irvington.

Michela, J.L., Boni, S.M., Manderlink, G., Bernstein, W.M., O'Malley, M., Burke, W.W., & Schecter, C. (1988). *Perceptions of the work environment vary with organization and group membership and organizational*

position of the group. Working Paper. Unpublished manuscript, Teachers College, Columbia University, New York.

Nadler, D.A., & Tushman, M.L. (1977). A diagnostic model for organization behavior. In J.R. Hackman, E.E. Lawler, & L.W. Porter (Eds.), *Perspectives on behavior in organizations.* New York: McGraw-Hill.

Schein, E.H. (1985). *Organizational culture and leadership.* San Francisco: Jossey-Bass.

Tagiuri, R., & Litwin, G.H. (Eds.). (1968). *Organizational climate: Explorations of a concept.* Cambridge, MA: Harvard University Press.

Tichy, N.M., & Devanna, M.A. (1986). *The transformational leader: Molding tomorrow's corporation winners.* New York: John Wiley.

Weisbord, M.R. (1976). Organizational diagnosis: Six places to look for trouble with or without a theory. *Group & Organization Studies, 1,* 430-447.

SOURCE

Burke, W.W., & Litwin, G.H. (1989). A causal model of organizational performance. In J.W. Pfeiffer (Ed.), *The 1989 annual: Developing human resources.* San Diego, CA: Pfeiffer & Company.

THE CONGRUENCE MODEL OF ORGANIZATIONAL BEHAVIOR

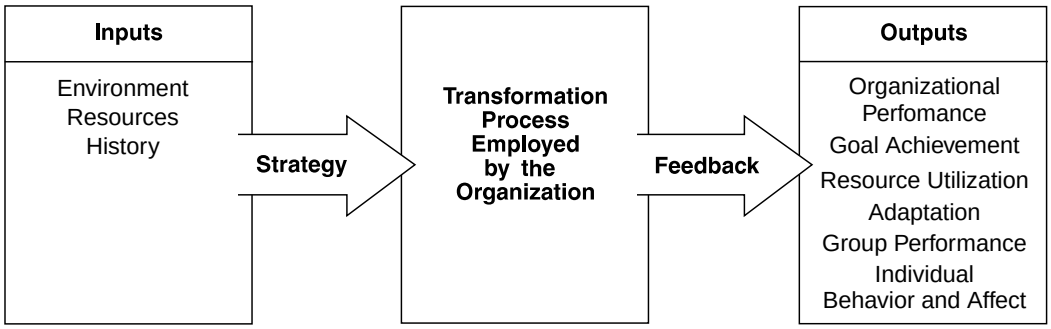
There are many different ways of viewing organizations and the patterns of behavior that occur within them. Increasingly, organization-development (OD) professionals regard organizations as complex and open social systems (Katz & Kahn, 1966) that receive input from the larger environment; subject that input to various processes of transformation; and thus produce output.

As a system, an organization is composed of interdependent parts. Change in one part of the system produces changes in other parts. An organization also has the property of equilibrium; the system generates energy to move toward a state of balance among its parts. In addition, an organization needs to maintain favorable ratios of input and output with the environment in order to survive over time.

Although the system perspective is useful, it alone may be too abstract to be useful to managers. In response, a number of organizational theorists have attempted to develop more pragmatic theories or models based on the system paradigm. Nadler's (1983) approach, which he calls the *congruence model of organizational behavior* (Nadler & Tushman, 1977, 1979, 1981), represents such an attempt. Nadler's model depends on the relationships between input, transformation, and output. In this framework, the principal inputs to the system of organizational behavior are the following:

- ***Environment,*** which provides constraints, demands, and opportunities;
- ***Resources*** available to the organization;
- ***History*** of the organization; and
- ***Organizational strategy,*** which may be the most crucial input because it consists of key decisions regarding the match of the organization's resources with the constraints, demands, and opportunities in the environment and within an historical context.

In general, the output of the system is the organization's effectiveness at performing in a manner consistent with its strategic goals. Specifically, the output includes not only *organizational performance* as a whole but also its major contributors, which are *group performance, individual behavior,* and *affect.* Thus, as is shown in the figure titled "The System Model Applied to Organizational Behavior," the organization is viewed as a mechanism that takes inputs (strategy and resources in the context of history and environment) and transforms them into outputs (patterns of individual, group, and organizational behavior).



The System Model Applied to Organizational Behavior

The major focus of organizational analysis, therefore, is this process of transformation. According to the congruence model, the organization is composed of four major components:

- The ***tasks*** of the organization, or the work to be done and its critical characteristics;
- The ***people*** who are to perform organizational tasks;
- The ***formal organizational arrangements,*** which include various structures, processes, and systems that are designed to motivate individuals and to facilitate task completion; and
- The ***informal organizational arrangements,*** which include patterns of communication, power, and influence as well as values and norms that are neither planned nor written but tend to emerge over time and that ultimately characterize actual functioning.

The basic hypothesis of the model is that an organization is most effective when its major components are congruent with one another. The relationships among these components are illustrated in the figure titled "The Congruence Model of Organizational Behavior." Organizational problems such as ineffectiveness stem from poor fit or lack of congruence among organizational components. For example, the skills and abilities of the individuals who are available to do the necessary tasks must be congruent with the demands of those tasks; at the same time, the rewards that the work provides must be congruent with the needs and desires of the individuals.

This approach to organizations is a contingency approach. There is no one best organizational design or style of management or method of working; rather, different patterns of organization and management are most appropriate in different situations. The model recognizes the fact that individuals, tasks, strategies, and environments may differ greatly from organization to organization.

REFERENCES

Katz, D., & Kahn, R.L. (1966*). The social psychology of organizations.* New York: John Wiley.

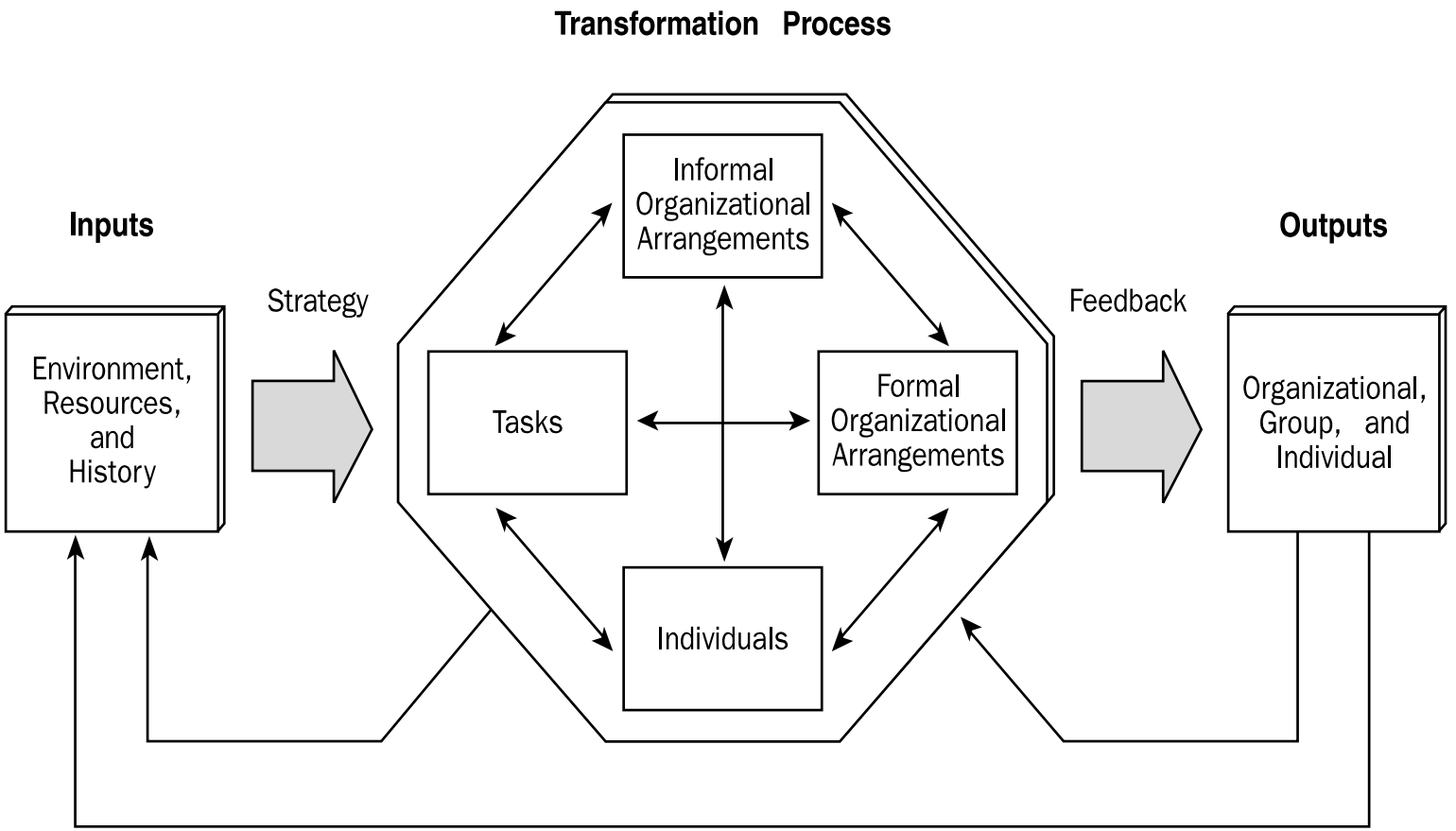
Nadler, D.A., & Tushman, M.L. (1977). A diagnostic model for organizational behavior. In J.R. Hackman, E.E. Lawler, & L.W. Porter (Eds.), *Perspectives on behavior in organizations.* New York: McGraw-Hill.

Nadler, D.A., & Tushman, M.L. (1979). A congruence model for diagnosing organizational behavior. In D. Kolb, I. Rubin, & J. McIntyre (Eds.), *Organizational psychology: A book of readings* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Nadler, D.A., & Tushman, M.L. (1981). A congruence model for diagnosing organizational behavior. In D.A. Nadler, M.L. Tushman, N.G. Hatvany (Eds.), *Approaches to managing organizational behavior: Models, readings, and cases.* Boston: Little, Brown.

SOURCE

Nadler, D.A. (1983). Organizational analysis, design, and implementation: An approach for improving effectiveness. In L.D. Goodstein & J.W. Pfeiffer (Eds.), *The 1983 annual for facilitators, trainers, and consultants.* San Diego, CA: Pfeiffer & Company.



The Congruence Model of Organizational Behavior

Adapted from D.A. Nadler and M.L. Tushman. "A Congruence Model for Diagnosing Organizational Behavior," in D. Kolb, I. Rubin, and J. McIntire, *Organizational Psychology: A Book of Readings* (3rd ed.), Prentice-Hall, 1979. Used with permission.

DESIGNING ORGANIZATIONS TO COPE WITH TASK UNCERTAINTY

All organizations must function with some degree of what Jay R. Galbraith (1977) calls *task uncertainty.* Galbraith defines task uncertainty as ". . . the difference between the amount of information required to perform the task and the amount of information already possessed by the organization" (p. 36).

Any organization that grows, that undertakes new challenges, or that merely responds proactively to the ever-changing external environment exposes itself to task uncertainty. The more task uncertainty with which an organization is faced, the more it must adjust its ways of doing business. Galbraith identifies two broad categories of organizational design strategies for coping with task uncertainty:

- As task uncertainty grows, organizations can adjust ***conventional bureaucratic mechanisms*** to meet the challenges.
- When task uncertainty overloads the hierarchy's ability to cope, organizations must invoke ***alternative organizational design*** strategies.

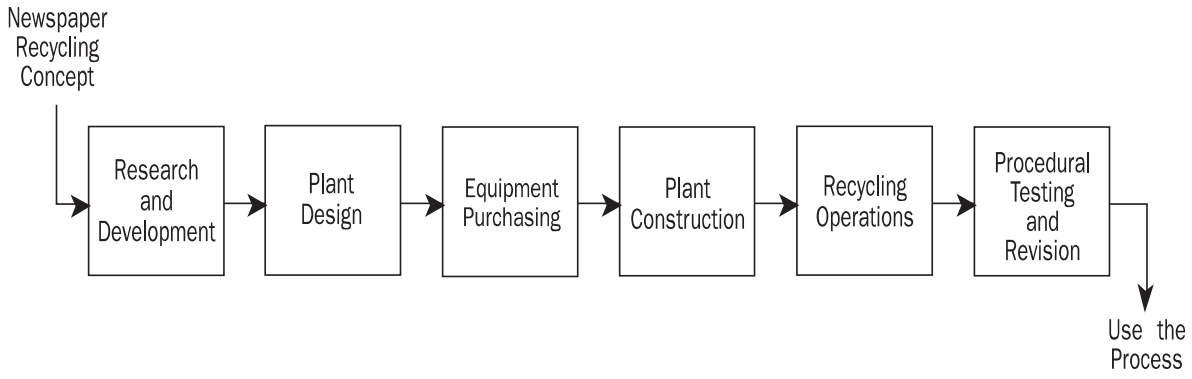
CONVENTIONAL BUREAUCRATIC MECHANISMS

The organization's hierarchy, rules and procedures, planning processes, and spans of control are four variable mechanisms whose manipulation will affect the organization's ability to cope with task uncertainty.

One can explore the roles of the four mechanisms in the context of a hypothetical paper mill developing its capability to recycle used newspaper. Although the mill has more than a century of experience in manufacturing paper from pulp wood, recycling newsprint requires new technology and introduces task uncertainty to the organization's managerial processes. Nobody in the company has relevant knowledge of the new methodology, and the task uncertainty is amplified by the urgency of the project. There is little spare time for research and development, because the public's environmental concerns inspired the mill to voluntarily institute paper-collection programs more than three years before it had the capability to recycle the old newsprint. As a result, discarded newspapers are now stacking up in costly warehouse space.

This project will affect every aspect of the mill's operation, from the purchase and production of raw materials to public relations and marketing. Merely installing the new plant and equipment is a large project that will absorb the full energies of many departments. Cooperation among the groups of employees and managers who are responsible for the project is vital.

The paper mill's organizational design goal is to cope with an *information-processing problem.* The paper mill needs to coordinate the efforts of different divisions that are responsible for different phases of the project. Galbraith portrays the division of labor for introducing technology as a flow chart consisting of six steps. The development of the paper mill's recycling capabilities can be portrayed as follows:



Work Flow for Recycling Project in Paper Mill

Adpated from: J.R. Galbraith, 1977, *Organization Design.* New York: Addison-Wesley.

The Hierarchy

When divisions of an organization are responsible for serial steps in a developmental process, it means that preceding steps must be completed before subsequent steps can be undertaken. Schedules and deadlines often are problematic. In the case of the recycling-development project depicted in the above figure, the design must be completed before purchasing and building can begin. Of course, ending stages of former steps probably will overlap with beginning stages of latter steps. Costs and other criteria for the purchasing and construction contracts are constraints that must be considered by the research and design departments. Similar interdependencies exist among all involved departments. Communication of these constraints and the resolution of inter-departmental conflicts are information-processing chores that must be completed successfully.

Because this hypothetical paper mill has never before introduced this technology, the information processing takes place in the face of substantial task uncertainty. The information-processing demands could overburden the organization, because there are numerous questions to be hashed out among the affected departments. However, Galbraith mathematically demonstrates that making use of the organization's hierarchy can greatly decrease the burden of information processing.

Galbraith's demonstration works as follows: If all six departments involved in the recycling project must communicate directly with and reach agreement with one another, the project will require fifteen channels of communication.[1]

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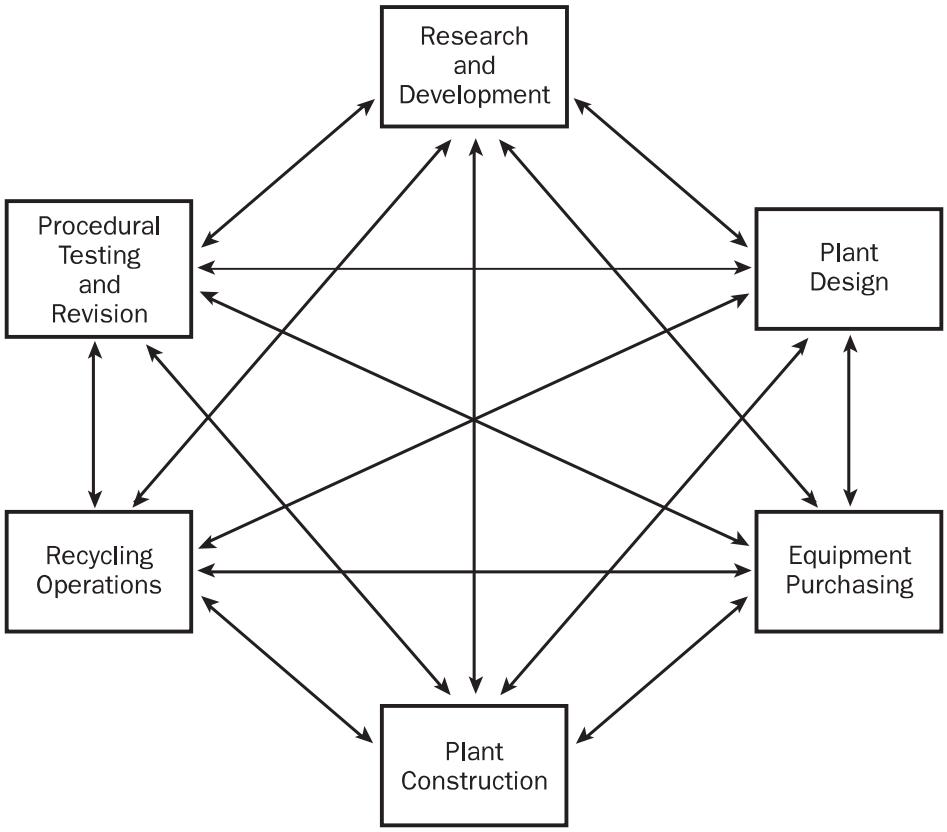
[1] Galbraith presents a general formula for calculating the number of channels needed for any given number of departments: $1/2 \times n \times (n-1)$, where n is the number of departments.



Direct Communication Between Departments Requires Fifteen Channels for Information Processing

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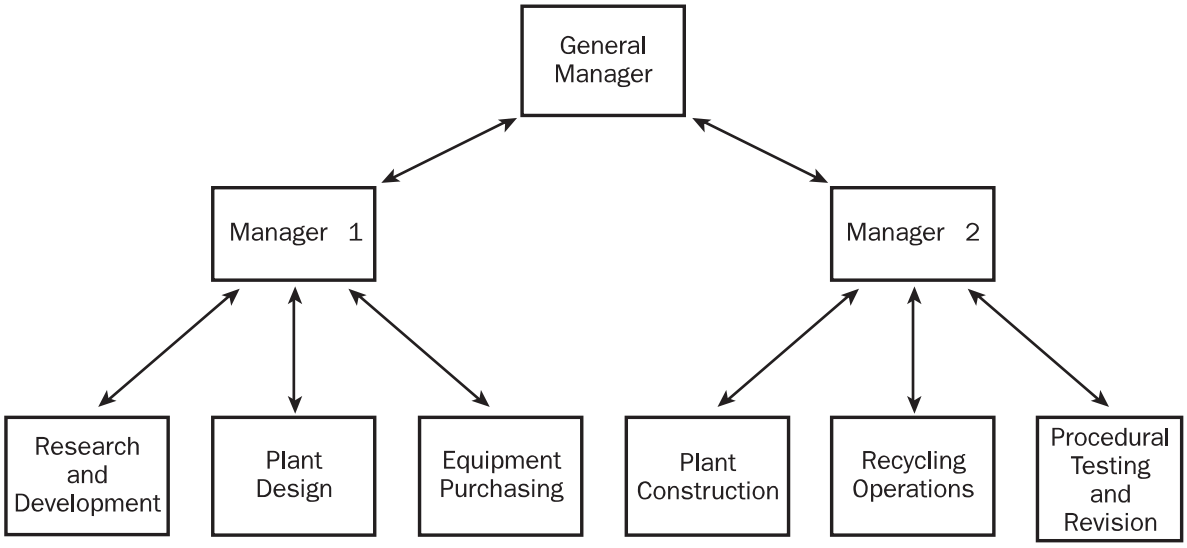


Using the Hierarchy Requires Only Eight Channels for Information Processing

On the other hand, if departments report to managers rather than attempting to communicate directly, as few as six, seven, or eight information-processing channels might be sufficient. In other words, fewer communication channels are needed if the organization communicates through the formal hierarchy (the chain of command) than if each department communicates directly with every other department. Theoretically, the use of the hierarchy lessens the information-processing burden, and the comparative advantage of using the hierarchy becomes very large as the number of departments involved in a project increases. If fifteen departments are involved, direct communication would require 105 information-processing channels; in contrast, making use of the hierarchy could require as few as fifteen channels.

Rules and Procedures

Rules and procedures, in combination with the hierarchy, can be used by the organization to lessen the information-processing burden. As Galbraith explains, rules and procedures are merely previously thought-out answers to procedural questions. For a problem or decision that is repetitive, a rule or procedure saves communication time and effort.

In the case of the paper mill, once a procedure has been established for purchasing recycling equipment, that procedure may be applicable in the future. The purchasing department might be able to make subsequent equipment purchases for the project with little vertical or horizontal communication. Rules and procedures tend to push routine decision making to lower levels of the organization.

The Planning Process

Shifting decision-making authority to the lowest practicable level of the organization tends to decrease the burden on the information-processing system. One way to accomplish this is to professionalize positions—to hire competent experts and give them the authority to make decisions within the scope of their expertise.

Professionalization, however, only partly satisfies the need for coordination among departments. Some decision criteria can be met by more than one alternative, and an expert's choice will not necessarily satisfy other criteria unless there has been some advance planning. For instance, without input from other departments, a highly trained engineer working for the paper mill's purchasing department might recommend equipment that cannot handle the volume of material to be recycled, because the equipment meets other purchase criteria such as ease of maintenance. One way to avoid such mistakes is to set goals as part of a planning process. If the engineer were aware of the overall goals for the system, he or she would not choose equipment with insufficient recycling capacity.

Decreasing the Span of Control

Another method to lessen the information-processing strains on individual managers is to decrease their spans of control by making them responsible for the performances of fewer subordinates.

ALTERNATIVE STRATEGIES FOR ORGANIZATIONAL DESIGN

The more novel the requirements to make decisions and the more frequent the exceptions, the more likely that task uncertainty will overwhelm the organization's ability to cope by manipulating variables such as hierarchies, rules and procedures, planning processes, and spans of control. The organization may be able to cope with the task uncertainty only by decreasing its demand for information processing or by increasing its capacity to process information.

Lessening the Demand for Information Processing

Galbraith suggests that the demand for information processing can be lessened by manipulating the organizational environment, by creating slack resources, or by creating self-contained tasks.

Manipulate the Environment

According to Galbraith, rather than "modifying its own structure and processes, the organization can attempt to modify the environment." In this case, the organization is attempting "to reduce uncertainty about critical events" (p. 50). If the paper mill's ability to develop the technology to recycle newspapers is uncertain, it could lobby the government to support methodological research or to create tax incentives, seek changes in laws that mandate recycling, join with other paper mills to develop recycling facilities, attempt to change public attitudes about the construction of new landfills, or subcontract its share of the recycling responsibility to a company that knows how to do recycling. If these methods fail, the paper mill could reposition itself in the environment, perhaps altering its goals by selling its paper-production assets and by entering another line of business.

Create Slack Resources

When an organization lowers its performance standards, the number of decisions that require information-processing resources decreases. For instance, if the paper mill is willing to use equipment that recycles paper less efficiently than originally was required, the number of potential providers of the equipment would increase, and the difficulty of finding an adequate provider would decrease. If it is willing to rent more warehouse space to store unrecycled newspapers, the deadline for installing the equipment and constructing the plant could be extended, thereby lessening decision pressures.

Unfortunately, the creation of slack resources usually will involve additional expenses, as will the other modes of coping with the information-processing burden.

Create Self-Contained Tasks

Information-processing demands also can be decreased by combining the authority and responsibility for the task into one self-contained unit. Instead of dividing the paper recycling project into functional phases (research and development, plant design, and so on), the entire project, from start to finish, could be assigned to a task force.

Increasing the Capacity To Process Information

Galbraith suggests that the capacity to process information can be increased by investing in vertical-information systems or by authorizing lateral relations.

Invest In Vertical-Information Systems

Giving managers more project information may overwhelm their abilities to process the information. Investment in additional managerial staff, assistants, computers, and human-machine information systems can increase the organization's information-processing capacity. If the technology for recycling paper is in a great deal of flux, for example, the research-and-development department may benefit from acquiring more personnel or computer resources to enable it to sort through the options.

Authorize Lateral Relations

Authorizing direct communication among departments involved with a task can increase the organization's ability to process information. Thus, the department responsible for contracting for plant construction might be permitted to work closely with the department responsible for plant design, even though the two departments are in separate chains of command.

REFERENCE

Galbraith, J.R. (1977). *Organization design.* Reading, MA: Addison-Wesley.

DIFFERENTIATION-INTEGRATION THEORY OF ORGANIZATIONAL DESIGN

There are two types of organizational-design theory. The first asserts there is one best way to organize and that it is appropriate in all situations. Such a view often focuses only on select aspects of organizations and does not take into account the nature of organizational environments. Lawrence and Lorsch (1967) advocate a second approach that has become known as the *contingency approach* of organizational design. Contingency proponents argue that different environments are characterized by different economic and technical attributes, each requiring a different competitive strategy to maximize organizational effectiveness.

ORGANIZATIONS AS SYSTEMS

Lawrence and Lorsch regard organizations as *social systems.* The behavior of one manager within an organization is systemically interrelated with the behavior of other managers, the organization's attributes, and the nature of organizational tasks. Organizations also are *open systems,* which means that they are influenced by and interrelated with the external environment. That is, managers' behaviors are determined by their needs and motives, the manner in which their needs and motives interact with the needs and motives of others, the attributes of the organization, and the attributes of the environment.

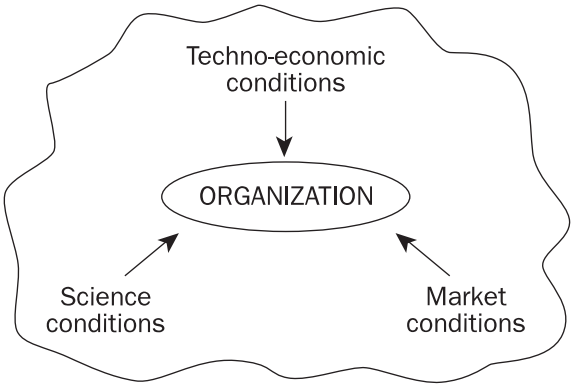
The conceptualization of organizations as environmentally interactive systems suggests that differences in environments require differences in the ways in which organizations are structured and managed. Lawrence and Lorsch became interested in the issue of organization-environment fit and, in 1963, initiated a large-scale research project to determine the kinds of organizations that operate effectively in various environments.

ORGANIZATIONAL ENVIRONMENTS

Lawrence and Lorsch describe environments as *"external conditions"* that can be classified into three basic categories:

- ***Techno-economic*** refers to the *production task* as it relates to products, processes, and economic conditions;
- ***Science*** refers to the acquisition and development of knowledge; and
- ***Market*** refers to the places in which products and services are utilized.

As shown in the figure that follows, open systems receive input from the environment in the forms of information and knowledge about the organizations' techno-economic, science, and market conditions.



When environments are highly dynamic, and when information and knowledge change quickly, organizations are not likely to know just how accurate the information received from the environment really is. Conversely, when environmental conditions are more stable, environmental information is less uncertain and tends to have greater utility for longer periods of time. Lawrence and Lorsch believe that the certainty and uncertainty of environmental conditions are characterized by *information clarity*, *the certainty of causal relationships,* and *the time required for conclusive feedback regarding the consequences of action.* The degree of certainty or uncertainty within techno-economic, scientific, and market segments of the environment functions as a moderator that influences the type of organizational design that is most effective in a particular situation.

Effects on Organizational Design

At the macro level, environmental conditions influence the degree to which any organizational structure can be effective. Volatile environments, which provide uncertain or unreliable information, require less structure. Conversely, stable environments, which provide reliable information, require more structure.

Environments characterized by scientific and technological discoveries and by the frequent introduction of innovative and improved processes probably would be unforgiving of procedurally bound bureaucratic structures. Such organizations probably would have difficulty interpreting uncertain environmental information, be slow to notice change, and be too inflexible to cope with or respond to changing conditions. Under these circumstances, survival would be questionable, as competitors soon would exploit the inappropriate fit. In contrast, in stable environments in which change is minimal and information is clear, the same bureaucratic characteristics might very well become valuable assets, offering those organizations a distinct competitive advantage.

DIFFERENTIATION

As organizational systems grow larger, they must divide into smaller parts (departments) in order to adapt to the external environment. Lawrence and Lorsch identify four basic departments that are typical of the organizations in their research study. They are:

- ***Sales,***
- ***Production,***
- ***Applied research,*** and
- ***Fundamental research.***

Research departments interact within scientific segments of the environment. As the name suggests, *fundamental* (or basic) *research* refers to research-and-development activities that are associated with a continual flow of scientific knowledge and information; this type of research most often deals with uncertain environmental information. On the other hand, *applied research* typically seeks to apply a known—and therefore less uncertain—body of knowledge. Sales and production functions are relatively self-explanatory and interact primarily with the techno-economic and market segments of the environment.

Organizations differentiate out of necessity; if they do not, they will be unable to accomplish goals or to adapt to environmental conditions. As differentiation increases, so do the differences between departments in terms of orientations and formal structures. Lawrence and Lorsch describe these fundamental differences as follows:

- ***Goal orientation.*** Functional departments are guided by managers who tend to focus on the particular goals of their departments. Sales managers align with sales issues; production managers focus on production issues; and research managers share a research orientation.
- ***Time orientation.*** Departments differ in the time horizons that they place on organizational issues. For example, engineers in fundamental-research functions tend to view organizational problems in terms of years. In contrast, production and sales managers tend to view organizational problems in terms of months, weeks, or even days.
- ***Interpersonal orientation.*** Departments differ in their concerns for task and concerns for relationships. Those in production, for example, may tend to remain preoccupied with production issues even when interacting with others. Those in sales, on the other hand, may tend to focus on building and maintaining relationships and may regard that as more important than the task of selling.
- ***Formality of structure.*** Departments differ in their organizational practices and formal structures with regard to depth of hierarchy; ratio of supervisory to nonsupervisory personnel; and standardized policies, procedures, and control mechanisms.

Lawrence and Lorsch did not intend these four fundamental differences to be all-inclusive but believed that they were accurate representations of the organizations studied. Overall, departmental differences were similar in that they facilitated interaction between the organization and the environment and created psychological barriers between departments.

Effects on Organizational Designs

The structure of departmental tasks requires interaction with different segments of the environment. For example, research must interact with scientific, sales with market, and production with techno-economic. Each environmental segment is characterized by differences in the relative certainty of information provided to the organization and, therefore, has a different effect on organizational as well as departmental structures. Accordingly, it is not unusual for structural differences to exist within organizations, as the fundamental purpose of a department is to facilitate organization-environment interaction.

INTEGRATION

Structural variations both facilitate organizational performance and inhibit its maximum effectiveness. Because of differences in environmental focus, orientation, and structure, department managers often perceive problems from different perspectives and, consequently, may have trouble seeing the "big picture" when making decisions.

Lawrence and Lorsch theorize that increased similarity in structure and orientation between two departments leads to more effective interdepartmental collaboration. Likewise, they predict that dissimilarity leads to difficulties with *integration,* which they define as "The quality of the state of collaboration that exists among departments that are required to achieve unity of effort by the demands of the environment." Lawrence and Lorsch conclude that organizations must find ways to balance the integration among functional departments if they are to become maximally effective. This is especially true when departments are working with issues that affect other departments.

THE RESEARCH

Lawrence and Lorsch studied organizations that were operating in three diverse environments, distinguished by the relative uncertainty of the techno-economic, scientific, and market information that they provided. The plastics industry was chosen as representative of an uncertain and dynamic environment; the packaged-foods industry represented moderately dynamic environments; and the standardized-containers industry represented slow-growth, stable environments. Lawrence and Lorsch predicted that within each operating environment, the most successful organizations would tend to develop structures consistent with the demands of their environments.

Lawrence and Lorsch found that *dynamic* environments often contain a continually emerging body of scientific knowledge and high degrees of uncertainty about the market impact of such knowledge. As predicted, the central issue for organizations in this environment is the capacity to create new products and production processes. The more successful organizations were characterized by flat hierarchical structures, wide supervisory spans of control, and less-formalized policies and procedures. Departments also were consistent with environmental demands. Dynamic environments provided the most uncertain information. Individual segments within the environments also varied: scientific information was the most uncertain, market sector was the next uncertain, and techno-economic was the least uncertain. Departments in the most successful organizations were least structured in research and most structured in production.

Organizations in the *less-dynamic,* packaged-foods industry experienced a similar ordering of environmental sectors (with scientific the most uncertain and techno-economic the most certain); however, the overall volatility of the environment was measurably lower, and information was more definite and reliable. Correspondingly, Lawrence and Lorsch found an overall increase in formalized structure within these organizations; yet as in the plastics industry, the most formalized structures occurred in production departments, and the least formalized were in research.

Stable environments produced a distinctly different ordering of environmental segments. Both moderately dynamic and highly dynamic environments yielded their most certain information in the techno-economic sector. In contrast, stable environments provided the most uncertain information in techno-economic sectors, followed by science, with market the most certain. Interestingly, techno-economic information was not more uncertain than in moderately dynamic and dynamic environments; however, scientific and market information was considerably more certain. In the container industry, in which uncertainties were fewer, the primary organizational issues were delivery and service and, as predicted, research and sales departments were considerably more structured.

A critical issue that emerged within all organizations was the interdepartmental conflict brought about by differences in functional, task, and interpersonal orientations. All organizations required high levels of integration and, in response, each organization utilized "integrators" to help resolve "conflicts of interest" and to facilitate interdepartmental relations. However, the nature of integration efforts differed according to the environment.

Because of rapidly changing information, *dynamic* environments demanded high levels of integration and increased integration efforts at lower levels of the organization. The integration activities often were carried out by entire departments that were dedicated to integration issues.

In contrast, organizations in *stable* environments tended toward more infrequent integration efforts at more centralized, senior-management levels. Integration activities tended to take the forms of direct managerial contact and paper-and-pencil systems such as letters and memos.

IMPLICATIONS OF DIFFERENTIATION-INTEGRATION THEORY

Lawrence and Lorsch observe that within each industrial setting, the most successful organizations are structured according to the differentiation requirements of the environment. It is clear that incongruent firms do not achieve the levels of performance reached by firms that are aligned with their environmental conditions. It also is clear that high-performing firms operating in highly dynamic environments dedicate significantly more effort to increasing interdepartmental integration and collaboration. The message to management from the research of Lawrence and Lorsch also is clear: Pay attention to the demands of the environment and to the method of integration of the organization's response.

REFERENCE

Lawrence, P.R., & Lorsch, J.W. (1967). *Organization and environment: Managing differentiation and integration.* Cambridge, MA: Division of Research, Graduate School of Business Administration, Harvard University.

	Environment	Hierarchical Structure	Span of Control	Policies and Procedures	Integrating Activities
Plastics	Dynamic, Uncertain	Flat	Wide	Informal	Low
Packaged Foods	Moderately dynamic	Moderate	Moderate	Moderately formal	Moderate
Standardized Containers	Stable, Certain	Tall	Narrow	Highly formalized	High

Organizational Environments and Structures

EXCELLENCE

Success in business is no accident. The winning companies do specific things that the losers either cannot do or ignore (Peters & Waterman, 1982). By observing the managerial practices of forty-three organizations selected for their excellence, Peters and Waterman claim to have isolated attributes that produced business success in fourteen "exemplary" companies.[2]

EIGHT ATTRIBUTES OF EXCELLENT COMPANIES

From several hundred interviews of employees from the excellent companies, Peters and Waterman consolidated their findings into a list of eight critical attributes that had contributed to the organizations' success. The eight attributes are:[3]

1. ***A Bias for Action;***
2. ***Close to the Customer;***
3. ***Autonomy and Entrepreneurship;***
4. ***Productivity Through People;***
5. ***Hands-On, Value Driven;***
6. ***Stick to the Knitting;***
7. ***Simple Form, Lean Staff;*** and
8. ***Simultaneous Loose-Tight Properties.***

Attribute One: A Bias for Action

The most outstanding organizations encourage their employees to innovate, even if it means risking failure. They reward small-scale experimentation whether or not it produces winning products. More importantly, excellent companies refrain from punishing their employees for low-cost attempts to develop creative ideas that do not quite work. The theory is that little is lost when an inexpensive trial run produces a failure, but a certain percent of the experiments are likely to succeed. If a company sponsors enough small experiments, the small percentage that succeeds will more than compensate for the larger number that fail.

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[2] Peters and Waterman's (1982) fourteen exemplary organizations were Bechtel, Boeing, Caterpillar Tractor, Dana, Delta Airlines, Digital Equipment, Emerson Electric, Fluor, Hewlett-Packard, IBM, Johnson & Johnson, McDonald's, Procter & Gamble, and 3M.

[3] Reprinted from T.J. Peters & R.H. Waterman, Jr. *In Search of Excellence: Lessons from America's Best-Run Companies.* New York: Harper & Row, 1982. Used with permission.

Less successful organizations sometimes make the mistake of studying ideas to death at great expense, simultaneously draining their employees' creativity and multiplying the possible losses should the project fail. The Edsel automobile is a classic example of a carefully planned project that was a colossal failure; the Apple computer was a low-cost garage experiment that paid off handsomely. One test run of the idea or product is worth thousands of words in formal proposals and abstract market studies. Ideally, the test run should require nothing more than a few hours' work and several hundred dollars for construction of a crude but tangible prototype. For example, despite the conventional wisdom that zoom lenses were too expensive for amateur use, Bell and Howell developed its first inexpensive zoom camera in just this manner.

Peters and Waterman claim that the key to an action-oriented bias is a vital, malleable, and creative organization. The excellent companies use a process that Peters and Waterman call *chunking.* Chunking means breaking things so that they can be manipulated and acted on. The action-oriented "chunks" may be special managers, task forces, teams, project centers, or the like. They usually are not part of the formal organization chart.

Many organizations seem to regard innovation as a quasi-subversive activity. This subversion is tolerated and quietly approved of in excellent companies. The natural tendency of bureaucracies is to resist innovation—to maintain the status quo. Excellent companies realize that experimentation by a subversive minority of innovators is the only way to gain a competitive edge.

The excellent companies also perpetuate their action orientation by limiting the life span of project task forces and other ad-hoc development groups; the task forces are assigned projects, produce results, and are dissolved before they have the opportunity to become bureaucratic themselves.

Attribute Two: Close to the Customer

The best and most successful companies seem to stay close to their customers—which does *not* mean that they have pushy salespeople. It means that they have genuine interest in solving the problems and meeting the needs of customers. The orientation is toward a long-term relationship. Thus, an excellent equipment manufacturer will not act as if there were no tomorrow by selling its customers more machinery or more advanced machinery than they need. The excellent companies also service what they sell and listen to customer feedback before redesigning or improving their products.

Attribute Three: Autonomy and Entrepreneurship

Peters and Waterman state that the most negative aspect affecting the success of big corporations is the loss of innovation. Research suggests that the number of innovations produced per research-and-development dollar is inversely proportional to the size of the organization. Large, bureaucratic companies tend to have difficulty in allowing creative innovation to flourish. In contrast, excellent companies set up small groups of "intrapreneurs" and give them the autonomy to experiment. In the excellent companies,

Peters and Waterman observed "an ability to be big and yet act small at the same time" (p. 201). To some extent, excellent companies exchange efficiency, economies of scale, and coordination of bureaucratic structures for the creative potential of decentralization and autonomy. In some cases, the organization is purposely fragmented into small, autonomous subunits, thus allowing entrepreneurship to survive at many locales simultaneously.

Although autonomy is necessary for entrepreneurship to occur, it is not the only requirement. The purpose of trading stable bureaucracy for chaotic autonomy is to construct an environment that nurtures *champions*—people who advocate new ideas. Champions are volunteer innovators; only a volunteer would have the perseverance to endure the numerous failures required before most successful new creations. For example, legend has it that Thomas Alva Edison painstakingly tried more than two thousand different materials as filaments before he produced an acceptably long-lived incandescent light bulb.

At General Electric, the promotion of ad-hoc research and development is called *bootlegging.* Researchers are given informal permission to scrounge resources (time and materials) for bootleg projects that are not funded by the company's development budget. These pet projects cost little and have occasionally produced billion-dollar products such as engineered plastics.

Another excellent company, 3M, decreed that 25 percent of each division's sales revenue must come from products that are less than five years old. Further, 3M encourages entrepreneurship by allowing a new product's champion to grow along with the product. As sales milestones are reached in the product's life cycle, the intrapreneur's salary, organizational status, and responsibilities also increase.

All of Peters and Waterman's excellent companies were found to have one important quality in common: Although they permitted autonomy among their small subunits, the organizations promoted and were characterized by intense, informal communication among the innovators.

Attribute Four: Productivity Through People

Organizations often act as if their employees are children who cannot be trusted. Excellent organizations treat their employees as adults; they share information with their employees; and they acknowledge that the employees are the primary source of productivity and profit. The leaders of excellent organizations communicate the purpose of activities to their subordinates and trust them to carry out the organization's goals. Excellent organizations communicate to their employees that they matter and are valued.

The terms used to refer to employees are good indicators of managers' attitudes. Employees are "hosts" at Disney Productions, "crew members" at McDonald's, and "associates" at J.C. Penney. The excellent companies are tough minded and make rigorous demands of their employees. However, they often use seemingly corny ceremonies and other hoopla to recognize achievement and effort. The excellent

companies also tend to use management-science approaches such as quality circles and organization-development techniques such as team building.

The excellent organizations that Peters and Waterman studied kept their work groups relatively small. Although most *Fortune 500* companies employ tens of thousands of employees, many of the best ones limit the size of their production plants to fewer than one thousand employees. This allows for a focus on individual contributions and for a highly individualized approach to management.

Furthermore, the excellent organizations often use their chains of command in informal ways. They do not disregard the hierarchy for decision-making purposes; rather, they are flexible enough to permit open-door policies, direct communication among levels, and wide-open dissemination of financial information about productivity and efficiency. Many of the excellent companies initiate new managers by having them gain some experience in actual production activities.

Attribute Five: Hands-On, Value Driven

The companies that Peters and Waterman cited had clear visions of their organizational values, which they pursued actively. They sought more than mere achievement of financial objectives. They collected organizational myths and stories that bolstered the company's basic beliefs. Almost always, these values were expressed qualitatively, not quantitatively; for example, rather than boasting about percentage of market share, one company's annual report boasted that the name of the company meant security of a specific type to its customers.

Peters and Waterman also noted seven consistent themes in the values held by the excellent organizations (see figure on the next page).

Although Peters and Waterman downplay the importance of individual charisma to the establishment of values in an organization, they do believe that visible, sincere, consistent, and committed leadership is crucially important. Peters and Waterman refer often to the "management by walking about" that occurs in some excellent organizations. This consists of informal involvement by managers who get out of their offices and make contact with the people who are designing, producing, and selling the products.

Attribute Six: Stick to the Knitting

From the business mistakes made in the conglomeration craze of the 1960s, Peters and Waterman derived the admonition, "Stick to the knitting" (p. 292). The acquisition of other types of organizations siphon managers' energies from the organization's "bread-and-butter" business. The best and brightest from the acquired companies leave, and the acquiring company's managers often are too inexperienced and uninformed about the new enterprise to be effective. Leaders whose experience lies elsewhere lack credibility with new subordinates. In addition, the values of the newly merged organizations often are incompatible. Those organizations that do succeed after an acquisition, merger, or

1. ***A belief in being the "best";***

2. ***A belief in the importance of the details of execution, the nuts and bolts of doing the job well;***

3. ***A belief in the importance of people as individuals;***

4. ***A belief in superior quality and service;***

5. ***A belief that most members of the organization should be innovators, and its corollary, the willingness to support failure;***

6. ***A belief in the importance of informality to enhance communication; and***

7. ***An explicit belief in and recognition of the importance of economic growth and profits.***

Values of "Excellent" Organizations

Reprinted, with permission, from T.J. Peters and R.H. Waterman, Jr., 1982, *In Search of Excellence: Lessons from America's Best-Run Companies.* New York: Harper & Row

diversification are those that affiliate with other companies that are in businesses similar to their own.

Attribute Seven: Simple Form, Lean Staff

Excellent companies tend to be simply structured. Complex structures such as matrix organizations sometimes are effective when used with major long-term projects but often produce unnecessary complications. Excellent companies also tend to keep their central staffs extremely lean and their levels of management few. Peters and Waterman complain that middle managers often do no more than make work and stop ideas from flowing either upward or downward. They advocate the "flattening" of organizations by means of drastic cuts to middle management.

Peters and Waterman recognize that all organizational-structure options (functional, divisional, matrix, and so on) have advantages and drawbacks. Their proposed organizational structure, which is capable of responding to matrix conditions, is a hybrid designed in accordance with three axioms or "pillars" (1982, p. 315):

1. ***The habit-breaking pillar:*** Remain willing to reorganize in order to optimize resources or to tackle new projects.
2. ***The stability pillar:*** Keep it simple and stable.
3. ***The entrepreneurial pillar:*** Reward experimentation, form small subunits, and encourage creative conspiracies.

Attribute Eight: Simultaneous Loose-Tight Properties

The final characteristic of excellent companies summarizes the previous seven attributes. The eighth attribute highlights the struggle to allow enough chaos into a company to remain entrepreneurial yet to maintain enough discipline to look after business, to stick to the knitting, and to adhere to values.

QUESTIONS ABOUT THE FINDINGS

Not all professionals agree with Peters and Waterman. Paul W. MacAvoy (1983) criticizes the way in which Peters and Waterman selected their "excellent" companies. MacAvoy says that the use of "press accolade, gossip and financial reports" (p. 3) as selection criteria was no more valid than "throwing darts at a list of big companies" (p. 3). According to MacAvoy, between 1971 and 1981, the fourteen exemplars performed no better for stock investors than did a portfolio of fourteen companies chosen at random from all stocks listed on the New York Stock Exchange. Further, companies lauded by Peters and Waterman, such as Boeing Company, Delta Airlines, and International Business Machines, did not conduct business very differently than did their unmentioned competitors, such as General Dynamics, USAir, and Prime. Other detractors have pointed out that some of the companies selected as excellent by Peters and Waterman have experienced business adversity in subsequent years.

Still, although critics have challenged Peters and Waterman's methodology and the continued profitability of the excellent enterprises, most have not questioned the validity of the conclusions themselves.

REFERENCES

MacAvoy, P.W. (1983, August 28). "The search for excellence" got lost en route. *Los Angeles Times,* p. 3.

Peters, T.J., & Waterman, R.H., Jr. (1982). *In search of excellence: Lessons from America's best-run companies.* New York: Harper & Row.

FASTER CYCLE TIME

Organizations that are first to reach the marketplace with products and services possess a clear advantage over their competitors. Their products and services are available to fill customer needs and are not tarnished by the "me too" image. The competitive advantage is so strategically significant that Meyer (1990) explicitly stated "*the first entrant into a market typically dominates that market in both share and profit margins."* One way in which this can be accomplished is through *faster cycle time.*

BASIC PRINCIPLES

Faster cycle time (FCT) is defined as an organization's *ongoing ability to identify, satisfy, and be paid for meeting customer needs faster than anyone else.* Meyer points out that the definition communicates several major elements of FCT.

- FCT is an *ongoing* process of finding ways to continually improve the complete business cycle. Meyer states that organizations can never relax in a competitive environment, for if they do not improve, the competition will. In other words, those who snooze lose.
- FCT is concerned with *identifying* specific customer needs in order to be first to fill those needs.
- FCT is concerned with *quality and customer satisfaction.* The implication is that quality can not be decreased in order to speed products and services to market.
- FCT organizations deliver value to customers and deserve to be *compensated adequately* for their contribution to increasing customer satisfaction.
- FCT strives to *meet customer needs.* This means that products and services that are not accepted by customers are not acceptable to the organization.
- FCT organizations introduce products and services *faster than anyone else* in order to gain competitive advantages and eventually to control their markets.

In summary, FCT is a means by which organizations speed their products and services to the marketplace. Yet, even though FCT emphasizes faster delivery, it does not mean simply that the pace of work is increased, nor does it mean that people are replaced by machines and advanced technology. FCT is a systemic integration of new values, organizational structures, and reward systems into the fundamental process of work within the organization in order *to increase the amount and speed of organizational learning.* For Meyer, six basic steps are required to successfully implement faster cycle time.

KEY STEPS TO FASTER CYCLE TIME

Faster cycle time is based on six fundamental principles or steps. All steps must be in place and operational in order to ensure the success of any FCT program. Meyer outlines the six steps as follows.

Understanding the Customer's Definition of "Value Added"

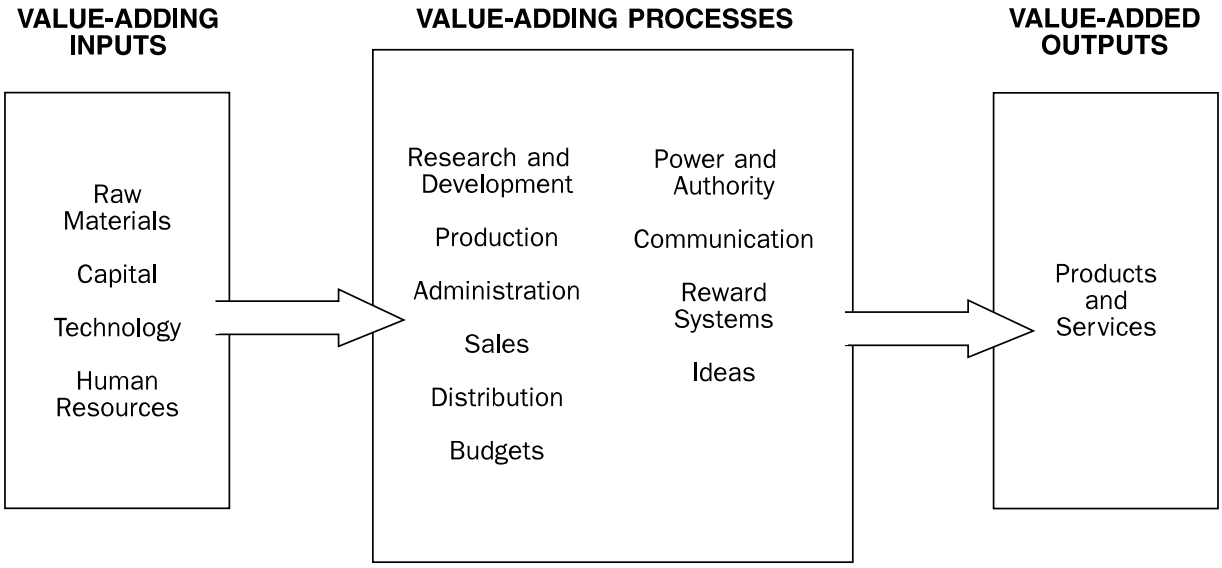
Faster cycle time addresses two classes of work within organizations: (a) work that makes products and services more valuable for end customers and (b) work that does not. Value-added work is that which a customer is willing to pay for, thus, value-added work increases revenue. Nonvalue-added work is an expense. The driving force of FCT is to *focus organizational effort on work that adds value for the end customer and eliminates work that does not.*

A crucial FCT focus is what constitutes an end customer. Meyer suggests that an end customer is anyone who is willing to pay for a product or service. The FCT description of "customer" differs from definitions found in other continual-improvement processes such as "total quality," primarily because FCT does not acknowledge internal customers. Meyer says that the concept of internal customers skews the understanding of what is value added. He points out that end customers produce revenue for the organization; internal customers produce cost.

Accordingly, the first step in FCT implementation is to precisely identify the organization's end customers. Once this is done, their definitions of what is value added must be determined. This information comes from the customers; any other source of information risks high levels of error. Then management defines the *value-added focus* of the organization, that is, its strategic direction and whether or not the organization is willing to commit sufficient resources to meet customer needs. A value-added focus results in a *value-added proposition*—a series of specific statements describing what is and what is not value added. These guide the organization toward accomplishing its value-added goals.

Focusing Organizational Work on What Adds Value to the End Customer

Meyer contends that the only way to differentiate between work that adds value and work that does not is to create a map of the organization's value delivery system. This includes everything that is required to produce a product or service and complete the input-throughput-output cycle, for example, organizational resources such as capital, technology, raw materials, and people (including suppliers and vendors) and internal processes such as research and development, production, administration, sales, distribution, power, authority, communication, and reward systems. An example of a value delivery system is shown in the figure on the next page.



Value Delivery System

Meyer recommends that unnecessary detail be limited in order to make it easier to identify the most important value-adding processes. Once identified, these processes can be mapped in greater detail. The detailed map should include key players, key tasks, and the time required to complete each task. Meyer cautions that, during the mapping process, there will be a strong urge to include the "should be"; it is critically important that the map reflect only the "how it is." Once the map has been completed and reflects all critical process steps, it can be reviewed, and the value-added and nonvalue-added steps can be identified.

Restructuring the Organization

A flat hierarchical structure and multifunctional work teams with blurred boundaries are essential for FCT. By their nature, large, centrally controlled, functionally differentiated, hierarchical organizations can not respond quickly to customer needs. A major reason is that such organizations tend to view customer concerns from a myopic, functional viewpoint and often have difficulty seeing the "big picture." Meyer believes that it is not possible to overcome the liabilities of a centrally controlled, highly specialized organizational structure. Effective FCT requires restructuring into a multi- (cross) functional, team-based organization. The implementation of multifunctional teams requires a shift in the balance of power within the organization so that responsibility for delivering the organization's value proposition is shared between many functional areas.

In partnership with customers, the multifunctional team is composed of representatives from each functional area. Their role is to support the team in value-added processes, as defined by the team. Meyer indicates that the paradigm shift to a

team-based structure requires an *organizational architecture* that emphasizes issues related to:

- team goals;
- team charters;
- team-member roles and responsibilities;
- team boundaries and limits;
- the team's relationships with other teams, other functions, and organizational management;
- team and personal rewards; and
- team-support requirements from functional areas.

The implementation and maintenance of a multifunctional team is a management responsibility, and management's commitment must be demonstrated in its behavior.

Striving for Process Development

Process focuses on "how" work is accomplished within the organization. Process improvements are notable competitive advantages for the organization. If an organization makes its internal processes more efficient and effective, there will be corresponding increases in speed to market and customer acceptance. The net effect is higher revenues, decreased operating costs, and higher earnings. Process improvements, therefore, must be pursued as enthusiastically as product and service developments. Meyer suggests that many organizations do not attend sufficiently to process because:

- meaningful process improvements are time consuming and difficult to implement;
- measuring process improvements is difficult and, consequently, not often done; and
- people attend to what is measured.

Process improvements begin with dedicating whatever time is necessary, establishing improvement goals, and developing meaningful process measures. These tasks are made considerably easier by selecting a *process champion* to aid with creating, communicating, and facilitating process discussions within the organization.

Setting Challenging Goals To Reduce Cycle Time and Publicly Measure Progress

Initial goals for reductions in cycle time should target no less than a 50-percent improvement. Meyer maintains that anything less does not reflect the true possibilities. For example, simply working harder can produce improvements of 20 to 30 percent. The idea is to "stretch" and achieve all improvement that is possible.

After challenging goals have been established, the focus shifts to measurement. If a cycle beginning and a cycle end can be defined, then what happens in between can be measured. Although determining what points to measure and what measures to use often can be subjective, it is important to select those points and measures that are easily understood by the organization and the industry. Measurement results then must be distributed publicly and displayed to clearly communicate progress toward meeting reduction goals.

Creating an Environment That Stimulates and Reinforces Continual Learning and Action

Faster cycle time is a *competitive strategy* that must be learned throughout the organization. Organizational learning differs from individual learning in two primary areas:

- organizational learning has a collective purpose, and individual learning does not; and
- organizations are social systems, and individuals are part of the social system.

Meyer defines organizational learning as the "creation of knowledge that is accessible and used throughout the entire organization to accomplish its mission." Organizational learning cannot take place until the people within the organization have access to information.

Organizations stimulate creativity and acquisition of knowledge by asking the question "so what?," by publishing resulting information, and by allowing a free flow and exchange of information throughout the system. Reward systems must be structured in a manner that reinforces learning and incremental progress toward FCT goals. However, organizational learning often requires a period of "unlearning" and "letting go" of existing organizational beliefs, policies, and power relationships.

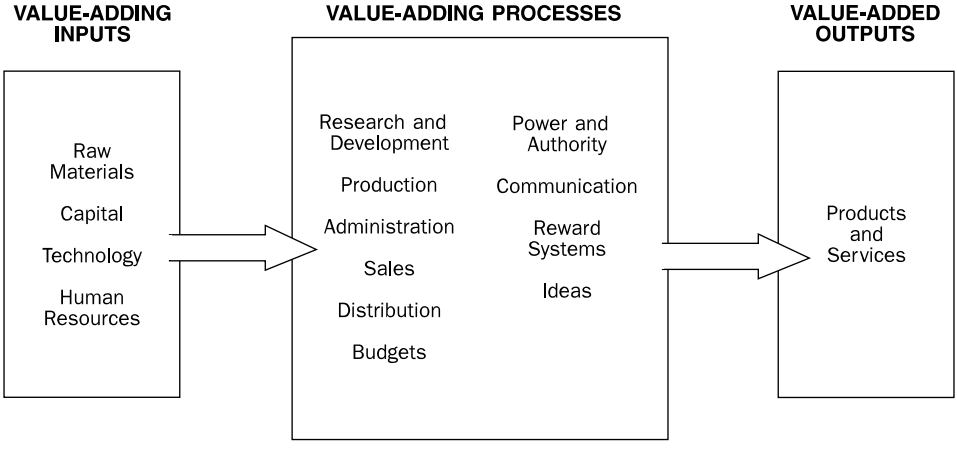
IMPLICATIONS

Faster cycle time is not an effortless task; it requires systematic changes in organizational values, learning, and methods of accomplishing work. Thus, FCT is an organization-wide cultural change that transforms "business as usual" into a streamlined, process-sensitive, continual-learning cycle that creates an ongoing competitive advantage for the organization because it becomes part of the organization's culture and value-delivery system.

REFERENCES

Davis, S.M. (1987). *Future perfect.* Reading, MA: Addison-Wesley.

Meyer, C. (1990). *Six steps to becoming a fast cycle time competitor* (rev. 1.22). Los Altos, CA: Strategic Alignment Group.



Value Delivery System

THE HAWTHORNE STUDIES

The famous Hawthorne studies, headed by Roethlisberger and Dickson (1936), have been analyzed, attacked, and defended for many years (Carey, 1967; Landesberger, 1958; Shepard, 1971). The studies were controversial not because of their findings but because of their philosophical interpretations. Under the guise of scholarly debate and critique, people argued about the worth, importance, and correctness of the human-relations approach.

At Western Electric's Hawthorne plant (for which the studies were named), a special test area was set up so that industrial psychologists could apply Taylor's (1911) time-study methods and could analyze work conditions to determine how people's capacity for work varies with the physical environment (light, heat, noise, ventilation, and so on). Workers and supervisors were selected to participate in the study, in which workers' behavior was measured against varying physical conditions. At first the findings seemed reasonable; for example, production levels increased when illumination was increased. Then things began to go awry; when the level of light was decreased, production continued to increase until workers were producing more than ever under conditions equivalent to bright moonlight.

At this point the engineers gave up, and a new research team from Harvard was brought in. Fritz Roethlisberger was the on-site head, and W.J. Dickson was Western Electric's personnel-department liaison. What soon became evident was that social relationships were influencing worker productivity. Some interpreted increased productivity to mean that the supervisor, who had been chosen on the basis of an excellent reputation, had developed a strongly loyal work group with high morale, and that the workers—who also had been screened—worked hard to satisfy their supervisor, even under adverse conditions. Therefore, the findings were interpreted to signify the importance of human relations. Another, less optimistic view, was that the workers were responding to their special treatment by working hard to please the researchers, even when conditions were poor. The latter explanation, commonly referred to as the *Hawthorne effect,* was thought to be true during the 1950s and 1960s, when a strong backlash swept toward the human-relations movement.

Actually, the correct interpretation lies somewhere in between these extremes. Katz and Kahn (1978) observed that the Hawthorne workers had the best supervisors, were given special privileges, and formed cohesive teams. They argued that these factors went far beyond the effects of special attention alone.

The Hawthorne studies were significant because they indicated that social factors have a strong influence on work behavior. As Roethlisberger (1950) put it:

> People like to feel important and have their work recognized as important....They like to work in an atmosphere of approval. They like to be praised rather than blamed....They like to feel

independent in their relations to their supervisors....They like to be consulted about and participate in actions that will personally affect them. In short, employees, like most people, want to be treated as belonging to and being an integral part of some group.

THE HUMAN-RELATIONS MODEL

Roethlisberger and Dickson (1936) created an organizational model that is depicted in the figure on the next page. In the model, every work unit became self-regulating. The development of positive work relationships (indicated by the work units) was regarded as beneficial to workers in that they regained a sense of group identification lost to them as family units became smaller with the absence of extended family in the household. Management also benefited because, when treated properly, workers would support high production goals, solve problems, and help one another. The prescription simply was to allow small groups of workers maximum freedom in controlling their own work. Within the groups, workers would establish their own patterns of coordination. In theory, by recognizing and supporting this informal organization, management would gain the support and cooperation of workers, which would lead to greater productivity and efficiency.

Over time, the human-relations concept gained a fair degree of acceptance among managers, although there also was considerable resistance. Many managers feared a loss of control or power, which was not an unrealistic concern. The laissez-faire, undirected approach prescribed conceivably could generate some anxiety even in a liberal manager.

AFTER THE HAWTHORNE STUDIES

By the mid-1950s, it was clear that productivity and efficiency were not attainable through the simple solutions generated by the human-relations advocates (Sales, 1966). The Hawthorne studies actually foretold this, and later parts of the study indicated that groups of workers regulate their output, limiting it to no more than a certain average amount per day even though they easily could produce more. This finding has been verified in other studies. Further research has indicated that unhappy workers can be highly productive, while satisfied workers in cohesive work groups can be quite unproductive. The relationships among satisfaction, group morale, and productivity turned out to be much more complicated than had been expected.

Eventually, managers became aware that the researchers' findings were true. Perhaps the disillusionment of some managers accounts for the subsequent backlash, reflected by articles in the *Harvard Business Review* with titles such as "What Price Human Relations?" (McNair, 1957) and "The Case for Benevolent Autocracy" (McMurray, 1958). In any case, "human relations" has become a ritual term, a concept that all believe in but with no action steps implied other than to treat workers with common courtesy.

Although the human-relations approach idealized by Roethlisberger and Dickson ultimately was discarded, it did provide the basis for the continued development of behavioral-science theories of organization.

REFERENCES

Carey, A. (1967). The Hawthorne studies: A radical criticism. *American Sociological Review, 32,* 403-416.

Katz, D., & Kahn, R. (1978). *The social psychology of organizations* (rev. ed.). New York: John Wiley.

Landesberger, H.J. (1958). *Hawthorne revisited.* Ithaca, NY: Cornell University Press.

McMurray, R.N. (1958). The case for benevolent autocracy. *Harvard Business Review, 36*(1), 82-90.

McNair, M.P. (1957). What price human relations? *Harvard Business Review, 35*(2), 15-39.

Roethlisberger, F.J. (1950). *The human equation in employee productivity.* Speech before the personnel group of the National Retail Dry Goods Association.

Roethlisberger, F.J., & Dickson, W.J. (1936). *Management and the worker.* Cambridge, MA: Harvard University Press.

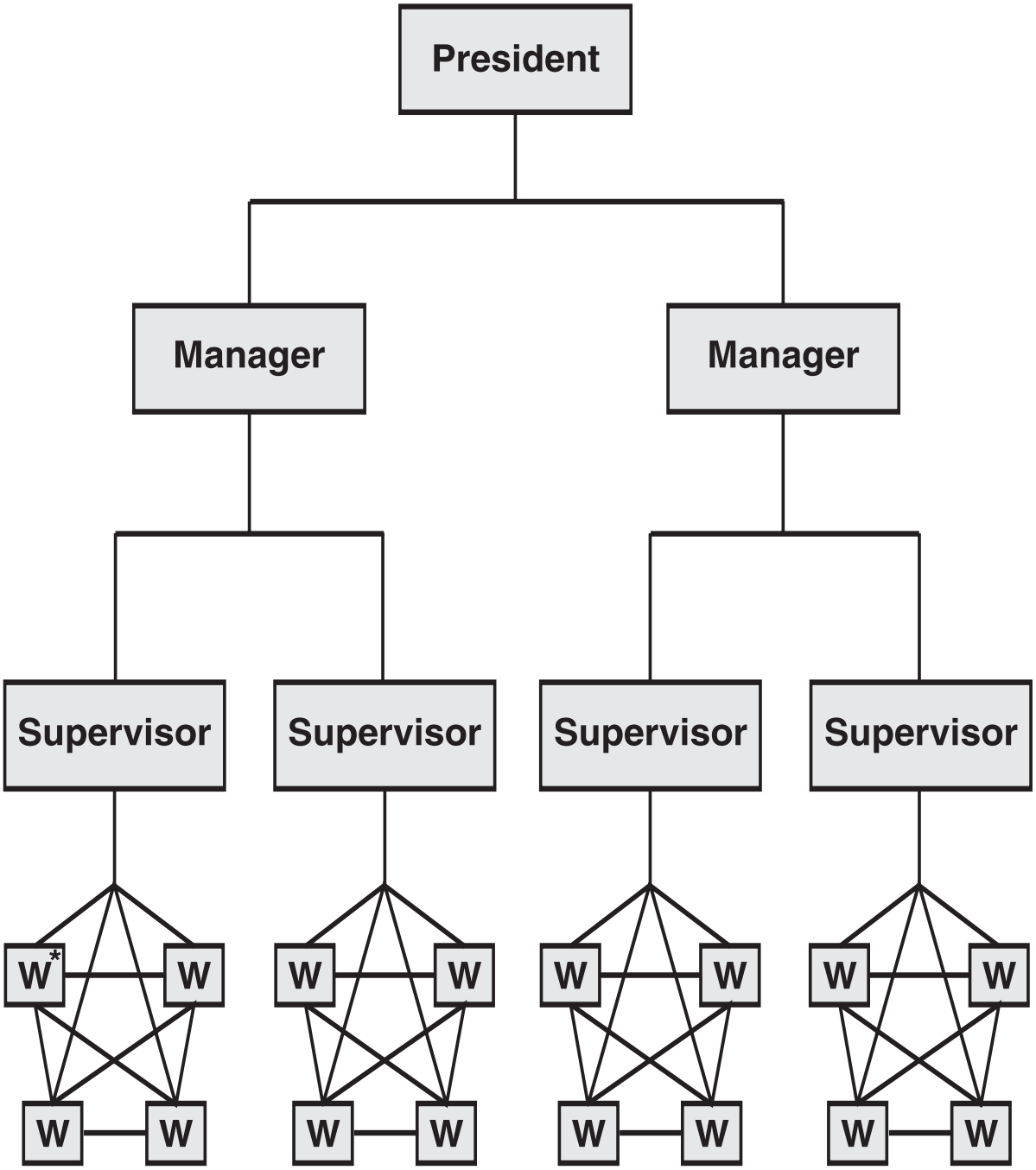
Sales, S.M. (1966). Supervisory style and productivity: Review and theory. *Personnel Psychology, 19,* 275-286.

Shepard, J.M. (1971). On Alex Carey's radical criticism of the Hawthorne studies. *Academy of Management Journal, 14,* 23-31.

Taylor, F.W. (1911). *Scientific management.* New York: Harper.

SOURCE

Sashkin, M. (1981). An overview of ten management and organizational theorists. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1981 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.



*W = Worker

Roethlisberger and Dickson's Human-Relations Model

INFORMATION-PROCESSING THEORY OF ORGANIZATIONAL DESIGN

Jay R. Galbraith (1977) observes that organizations can vary greatly in their effectiveness. As examples, he points out that the United States created a complex organization that successfully put people on the moon by 1970, while organizations dedicated to the rehabilitation of criminals often fail. The goal of organizational design is to increase the probability that organizations will be effective. Galbraith proposes that an *information-processing model can explain and predict the strategic choices made in organization design.*

EARLIER MODELS

At the beginning of the twentieth century, theorists such as Frederick Taylor (1911) introduced a vocabulary for what they called the "scientific study of management." Terms such as *division of labor, unity of command,* and *span of control* helped scientific managers to design more effective organizations. Adherents to Taylor's classic theory thought of organizations as comprising three interdependent elements. They believed that organizational design was constrained by opportunities to shape these three elements:

- ***Task,*** which consisted of the organization's goals and called for design strategies predicated on choices of objectives or market specialization;
- ***Structure,*** which consisted of the "organizing mode" and called for design strategies predicated on choices of how to divide the labor, how to configure the structure, and how to distribute power or break it into departments; and
- ***Reward systems,*** which consisted of the method for integrating individual efforts and called for design strategies predicated on choices of promotion basis, leadership style, and compensation system (such as piecework, hourly wages, salary, bonus plan, and so on).

The Hawthorne studies of the 1930s (Roethlisberger & Berger, 1939) put a humanistic spin on the mechanistic theories of scientific management. The resultant *human-relations approach* emphasized the interactions among work-group members and their leaders as determinants of work outcomes.

In the 1950s and 1960s, computers increasingly became essential business tools, and management theorists added a fourth element to the model first proposed by the scientific-management school: the *information and decision process* (March & Simon, 1958; Cyert & March, 1963).

According to Galbraith's (1977) description of the information and decision process, this process increased managers' options for designing their organizations by allowing "a choice of the *decision mechanism* to be used in choosing an alternative, of

the *degree of formalization* of the data to be used in decision making, of the *scope of the data base*, and of the *frequency* with which the system produces decisions" (p. 26).

Galbraith identifies one more precursor to his own theory of organizational design: the *people approach.* The people approach comes from industrial psychologists, who use selection and placement to "cast" the organization, and from trainers and organizationdevelopment specialists, who design organizations by changing people. Tinkering with the "people element" allows managers to design organizations by:

- ***Training:*** molding the organization by changing members' skills, knowledge, or attitudes;
- ***Selection-recruiting:*** molding the organization by choosing members with skills, knowledge, or attitudes that appear appropriate; and
- ***Promoting and transferring:*** molding the organization by moving the right people into key positions.

GALBRAITH'S INFORMATION-PROCESSING MODEL

Galbraith claims that none of the earlier theories encompassed all the variables that affect organizational design. However, he does state that each theory has merit. To construct his own model of organizational design, Galbraith combined the scientific-management school's *task, structure,* and *reward-system* variables with the *information-and-decision-process* variables from the theory by that name. From the human-relations and people approaches, Galbraith added a fifth source of design variables, the *people* element. Galbraith's information-processing model for organizational design is depicted in the figure on page 78.

The star-shaped network of lines suggests that the five elements are interconnected. Galbraith's system is dynamic rather than static; changes in one element will upset the equilibrium of the entire system. For example, changing the *task* characteristics of the organization (such as making its goals more diverse by adding a new product) will affect each of the other four elements as follows:

- The organization's *structure* may need to be altered by adding new departments or by dividing existing groups in order to produce and market the new product.
- Old *information technology* may need to be updated, because the greater complexity of a more diverse product line will require the management of a data base of much greater scope.
- More *people* may need to be hired to produce and market the new product, and others may need to be promoted or transferred.
- The *reward system* also may need to be altered by job redesign or by changes in compensation policies.

These changes can reverberate throughout the system for some time. Galbraith's model suggests that organizational design must be planned holistically rather than piecemeal in order to avoid unpredicted and unwanted side effects.

REFERENCES

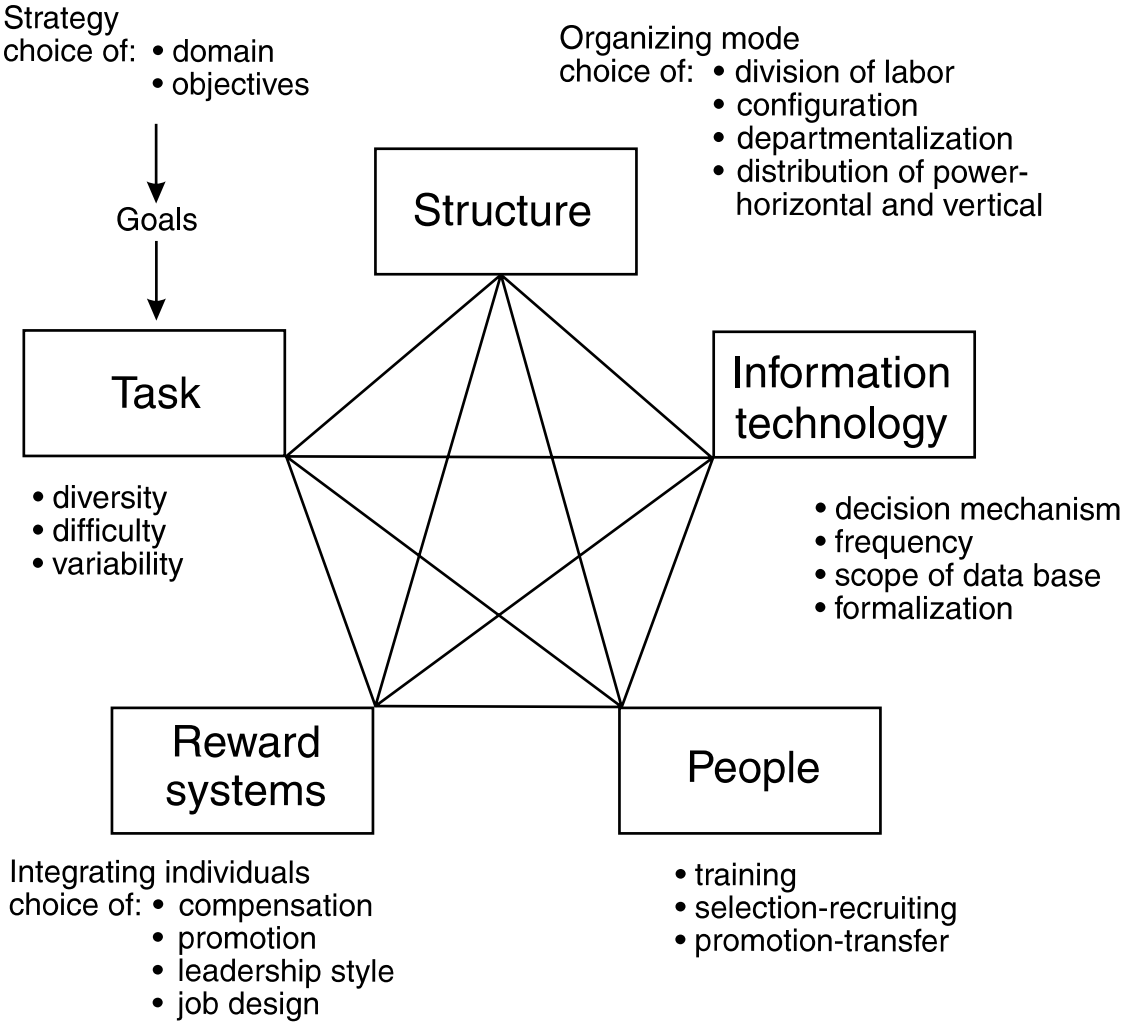
Cyert, R., & March, J.G. (1963). *The behavioral theory of the firm.* Englewood Cliffs, NJ: Prentice-Hall.

Galbraith, J.R. (1977). *Organization design.* Reading, MA: Addison-Wesley.

March, J.G., & Simon, H. (1958). *Organization.* New York: John Wiley.

Roethlisberger, F.J., & Dickson, W.J. (1939). *Management and the worker.* Cambridge, MA: Harvard University Press.

Taylor, F.W. (1911). *The principles of scientific management.* New York: Harper & Row.



Variables in Organizational Design Policy

From J.R. Galbraith, 1977, *Organizational Design Reading,* MA: Addison-Wesley, p. 30. Reprinted with permission.

JOB ENRICHMENT

In his book *Work and the Nature of Man,* Frederick Herzberg (1966) expands his motivation/hygiene theory to present his criteria for job enrichment. These criteria are aimed primarily at employers who desire to expand their employees' jobs and to contribute to employees' senses of fulfillment and satisfaction.

Herzberg lists each criterion as a *motivator* with a corresponding *growth principle.* The first motivator is *achievement* and, corresponding with achievement, *recognition* for that achievement. An achievement, no matter how small, is a learning experience. When one achieves something, one learns and grows from the experience. Especially at first, a person wishes to be recognized and praised. As time goes on, and that person feels that others are aware of his or her accomplishments, he or she relies less on praise from others and more on internal feelings of pride and satisfaction.

Second, an employee must be given increasing amounts of *responsibility* in a job in order for him or her to feel a sense of growth and expansion in the job. As a job is made more complex, the employee must *piece together the components* and *master the entire picture.*

A sure way to "kill" a job is with a tightly woven, inflexible job description. Ideally, there should exist an open-ended job description, thus permitting employees to *expand creatively,* take on *new responsibilities* or tasks, and *adapt* to the changing needs or interests of either the organization or themselves.

Of course, *advancement*—whether formal or informal—contributes to the enrichment of a person's job. The most important facet of advancement is that it confronts employees with the need to make more decisions, most of which are less clear-cut. *Having to choose and to make decisions* is a major contributor to personal growth.

Finally, and perhaps most obvious, to feel truly enriched by one's job, a person needs to be *interested* in it. If one is interested in the work or subject matter, not only will he or she be likely to work harder but the employee will be less likely to seek fulfillment from the lower-level hygiene factors such as working conditions, relationships with work peers, and level of supervision.

Not every job a person holds can satisfy all these criteria. However, the employer who strives to meet the criteria will probably have less turnover and more satisfied, productive workers.

According to Herzberg (1976), "The purpose of job enrichment is to assist in *motivating* employees to good work performance, not just to *move* them" (p. 106). He endorses "orthodox job enrichment," which is achieved by taking an existing job and installing the motivation factors into it. The factors that concern the employee's growth, recognition, advancement, responsibility, achievement, and opportunity in the job also

directly affect the employee's feelings about the job and his or her level of motivation. Thus, a job that contains both the motivating factors and the hygiene factors would be a motivating job.

Herzberg also lists eight components of a good job:

1. ***Direct Feedback.*** Feedback must be administered promptly and directly—not through elaborate performance-review or other bureaucratic methods that delay it.
2. ***Client Relationship.*** Rather than pressure an employee to perform in accordance with a "corporate image" or "policy," giving the employee a live person as a "customer" is a great motivating factor. An employee may be much more motivated to produce a large number of widgets if Joe in shipping "needs them" than if producing a set number of widgets only is a standard in a policy manual.
3. ***Learning.*** People need to feel that they are growing on the job—that they are not stagnating. Ideally, the learning should have a direct effect on people's understanding of and ability to perform their jobs.
4. ***Scheduling.*** Different people function better at different times and at different paces. Deadlines must exist, of course; but if workers are held responsible for meeting deadlines in their own fashion, they will set their own paces, hours, and styles of working.
5. ***Appreciation for Individual Ability.*** People like to think that they are unique and special. A job that makes the worker feel like "just a number" or "a cog in the wheel" is sure to decrease motivation. However, in an organization in which individuals are recognized for their abilities, the workers feel independent, special, and valuable.
6. ***Responsibility for Costs.*** Employees often are unaware or unconcerned with their organization's budget and spending limits. Costs often can be controlled by giving employees "minibudgets," with responsibility for expenses.
7. ***Direct Communications.*** Policies that govern patterns of communication can be frustrating for both employees and managers. Organizational life can be made a lot simpler if employees are permitted to go directly to the people with whom they need to communicate.
8. ***Accountability.*** People should be matched to their jobs in terms of skill, ability, and education, and then held accountable for their results. This policy helps to make employees feel responsible for their work which, in turn, creates pride in a job well done.

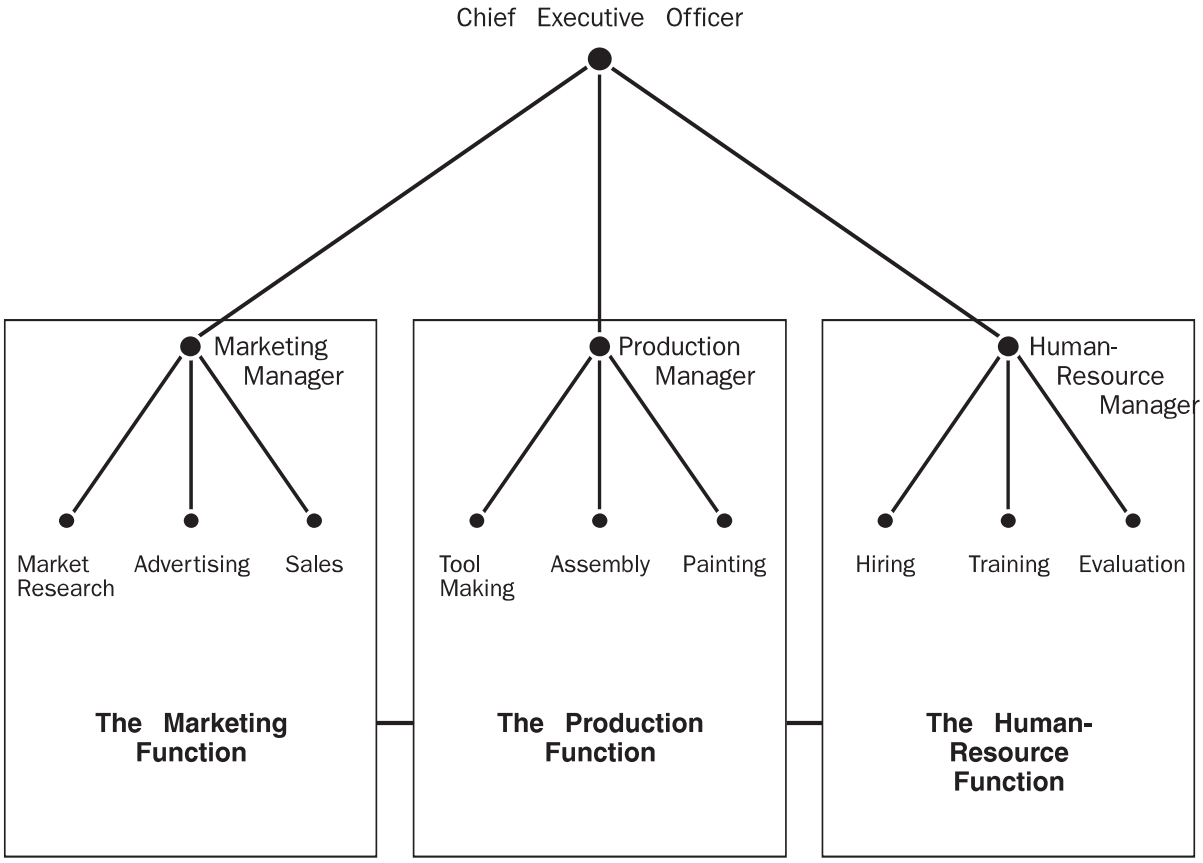
REFERENCES

Herzberg, F. (1966). *Work and the nature of man.* Cleveland, OH: World.

Herzberg, F. (1976). *The managerial choice: To be efficient and to be human.* Homewood, IL: Dow Jones-Irwin.

MATRIX MANAGEMENT

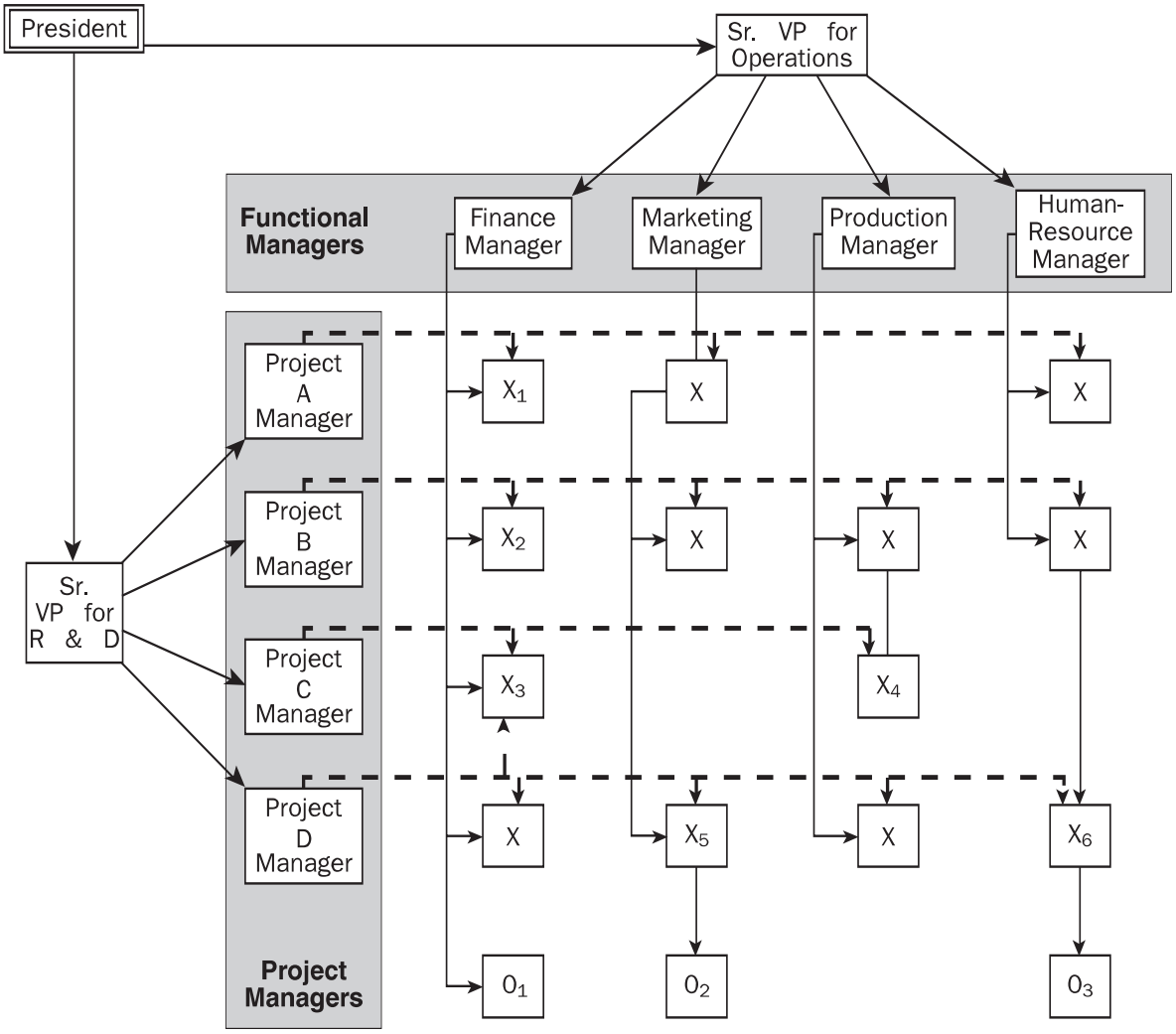
The traditional organizational structure resembles a pyramid. Most organizations have imitated the chain-of-command structure and the functional division of tasks that were begun by the military. The figure below depicts an example of this familiar organizational structure.



The Functionally Structured Organizational Pyramid

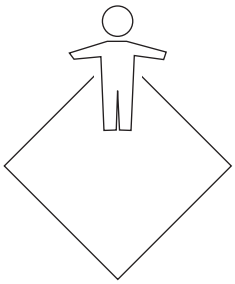
During the second half of the Twentieth Century, numerous organizations experimented with *matrix management,* a structural form that departs from the principle of unity of command that characterizes the military-inspired pyramid. Matrix management evolved because organizations were taking on new endeavors or were involved in research and development. These organizations discovered that they needed to assemble project teams of people from more than one functional department. Therefore, some employees were put in the traditionally unacceptable position of simultaneously working for more than one boss. These employees reported to both their

supervisors in the functional chain of command and to the leader who served as project manager. A matrix organization, as depicted in the second figure, legitimizes this violation of unity of command. With matrix management, the organization can benefit from both the stable, bureaucratic efficiency of the functional structure and the goal-oriented focus of task-group management.



A Hypothetical Matrix-Management Organization

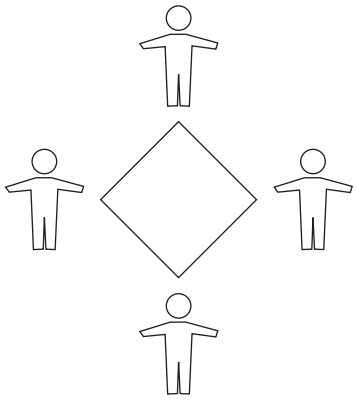
The reporting relationships in matrix organizations differ markedly from those in traditional organizations. Managers in traditional organizations have the undivided loyalty of their subordinates. Milan Moravec (1984) and Stanley M. Davis (1978) analyzed managerial roles in matrix organizations. Both Moravec and Davis observe that *top managers* in matrix organizations still have undivided authority over their subordinates (see third figure, next page).



Top Leadership

However, some of the leaders below the top manager are what Davis (1978) calls *matrix bosses.* In the second figure, the president, whose subordinates report only to him or her, is an example of a matrix *top manager.* The four project managers and the four functional managers are *matrix bosses.* In that illustration, the people marked "x" (who themselves may manage departments consisting of one or more people) are *two-boss subordinates.* The persons marked "o" are not two-boss subordinates, although they still are part of a matrix organization, and o_2 and o_3 report to supervisors who are two-boss subordinates. Notice that x_1, x_2, and x_3 are higher in the functional hierarchy than are o_2, o_3, x_4, and x_6. (That is, o_2, o_3, x_4, and x_6 are below more layers of functional supervision than are the other three.) Also, note that x_3 has more than one project supervisor; that is, x_3 is working on two projects and, technically, is a three-boss subordinate.

The fourth figure depicts the matrix boss as a supervisor who must share with one or more other supervisors the authority over certain *two-boss subordinates.*



The Matrix Boss and the Two-Boss Subordinate

TYPES OF MATRIX ORGANIZATION

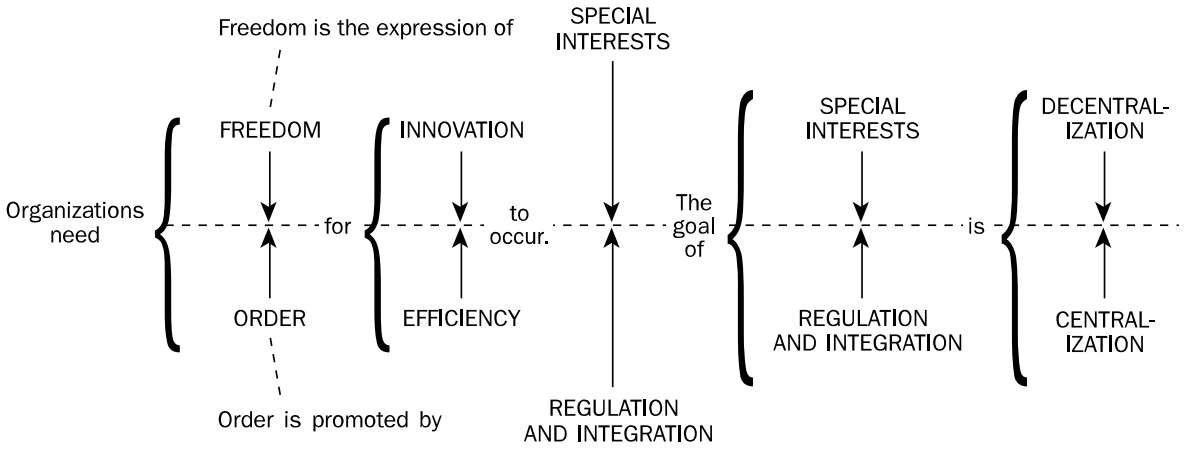
The applicability of the matrix system has broadened substantially since its inception. David I. Cleland (1984) has identified a dozen different forms of matrix organization. They are:

1. ***Project Management*** is a way to manage large-scale projects. The Manhattan Project, which developed the atomic bomb, is an example of this form. NASA has used project management in the space program, and IBM has used it to control company-wide development, production, and marketing of certain computer models. Government, industry, educational institutions, and the Department of Defense often use this form of matrix management.
2. ***Project Engineering*** is a form of matrix organization that shepherds products or projects through their design, development, and initial production. Project engineers often continue to oversee product repair, maintenance of production facilities, modifications, redesign, and quality assurance.
3. ***Product Management*** is a form of matrix in which responsibility for a particular brand is assigned to product managers. A product manager's authority may be limited to the gathering of data for top management, or it might extend to the development and implementation of approved plans for the product's marketing, advertising, and manufacturing functions.
4. ***International Management*** is a matrix form for coordinating the functional, geographic, and product-line management of multinational organizations.
5. ***Task-Force Management*** involves teams (usually temporary) that are created to deal with a particular problem, to perform a specific task, or to exploit an opportunity. Ad hoc in nature, task forces are composed of people with needed expertise from many parts of the organization.
6. ***Product-Team Management*** is a relatively immutable design of the organization as a matrix with functional and product hierarchies. According to Cleland (1984), in this form, "Certain key managers on one part of the matrix structure are held responsible for the *results* of a product or product line. On the other side of the matrix, managers who head up specialized functional activities are responsible for *facilitating* the use of resources within the organization" (p. 6). This form of matrix frees top managers from minute details, allowing them to concentrate on strategic planning.
7. ***Production-Team Management*** involves assignment of responsibility for the manufacture of a product (or a major subsystem of a product) to teams of production employees who participate in the scheduling and control of their own work. Typically, members of the team are cross-trained to perform one another's jobs, and supervisors act as facilitators rather than as traditional bosses.
8. ***New-Business-Development Teams*** are teams assembled across functional departments of an organization to develop new products or services. In essence, these teams are panels of experts from a variety of fields who focus their efforts on a particular goal or on discovering new opportunities. This permits a team to produce innovative ideas that would not emerge in a traditional, functional organization, in which needed expertise is fragmented among departments.

9. ***Quality Circles*** were developed by Japanese companies in the 1960s in order to upgrade the quality and reputation of their products. The "quality circle" is a small group of employees (usually between four and fifteen workers) who search for opportunities to enhance the quality of the products. These employees, who usually come from various divisions and levels of the organization, receive training in statistical methods of quality assurance. They then utilize their unique perspectives to generate new ideas for solving problems and for improving quality.
10. ***The Plural Executive*** is an unusual matrix structure. Instead of employing a single executive, some large and complex organizations have appointed top-management committees that lead by consensus. This approach has many of the advantages of group decision making: a variety of viewpoints, thorough discussions before decisions are made, and a wider pool of expertise. However, plural-executive management also suffers from the drawbacks of group decision making: diffusion of responsibility, pressure to conform, "groupthink," and—sometimes—painfully slow decision making.
11. ***Multiorganizational-Enterprise Management*** is typified by "mega-projects," such as the moon landings or the trans-Alaska oil pipeline. This form can involve a staggering array of organizations, including government agencies, major corporations, small businesses and contractors, universities, and research laboratories. The cultures, missions, and compositions of these organizations vary widely. In some cases, the efforts of such aggregations have been focused and coordinated to meet the goals of mega-projects by establishing multiorganizational matrices.
12. ***Joint Ventures*** occur when two or more organizations join together for a common enterprise. Key managers from the organizations involved usually form a panel to manage the joint project. This panel serves as a project team, pulling resources from the functional departments of the participating organizations and transforming those organizations into matrices.

SIMULTANEOUS DECENTRALIZATION AND CENTRALIZATION

As Davis (1978) observed, all social organizations require both freedom and order, and these often are in conflict. According to Davis, freedom permits innovation, and order permits efficiency. Organizationally, freedom is the expression of specialized interests (such as the desire to create a new product), and order (a basic condition for the efficient production of a product) is promoted by the regulation and integration of efforts. In organizational politics, the goal of specialized interests is *decentralization,* and the goal of regulation and integration is *centralization.* The following figure represents the way in which organizations' simultaneous needs for freedom and order lead to the contradictory goals of centralization and decentralization.



Matrix organization permits simultaneous centralization and decentralization of effort.

The Contradictory Needs for Freedom and Order

If an organization is decentralized, outputs of its constituent parts can be innovative and different from one another. A decentralized organizational design might seem ideal for the production of a wide variety of new products. However, organizational centralization is necessary for the achievement of economies of scale, efficiency, uniformity of quality, and consistency. Traditional organizations have opted for either decentralization (organizing autonomous units for each product) or centralization (limiting the range of effort and dividing into functional subgroups for each part of the effort). The matrix organization attempts to capture the innovative advantages of decentralization at the same time as it exploits the "efficiency" benefits of centralization.

PARALLEL ACCOUNTABILITY AND THE BALANCE OF POWER

Matrix organization comes with a cost. Two-boss subordinates always are in danger of displeasing one or both of their supervisors. A matrix boss cannot always predict when his or her demands of a subordinate may be superseded or contradicted by demands of the subordinate's other boss. Top managers sometimes must mediate disputes between functional and project managers over the allocation of material and labor resources.

In short, for a matrix structure to operate smoothly and efficiently, the organization must nurture the dynamic balance of power between the functional and project-management hierarchies so that approximate equality will exist over the long term (Lawrence, Kolodny, & Davis, 1977). Consequently, the successful use of the matrix form of organization requires:

- ***A high degree of cooperation;***
- ***Open, frequent, and effective communication*** (Adams, 1984);

- ***Parallel systems of accounting for the functional chain of command and for the project-management chain of command;*** and
- ***A personnel-evaluation system that provides feedback and career-advancement input from both chains of command.***

REFERENCES

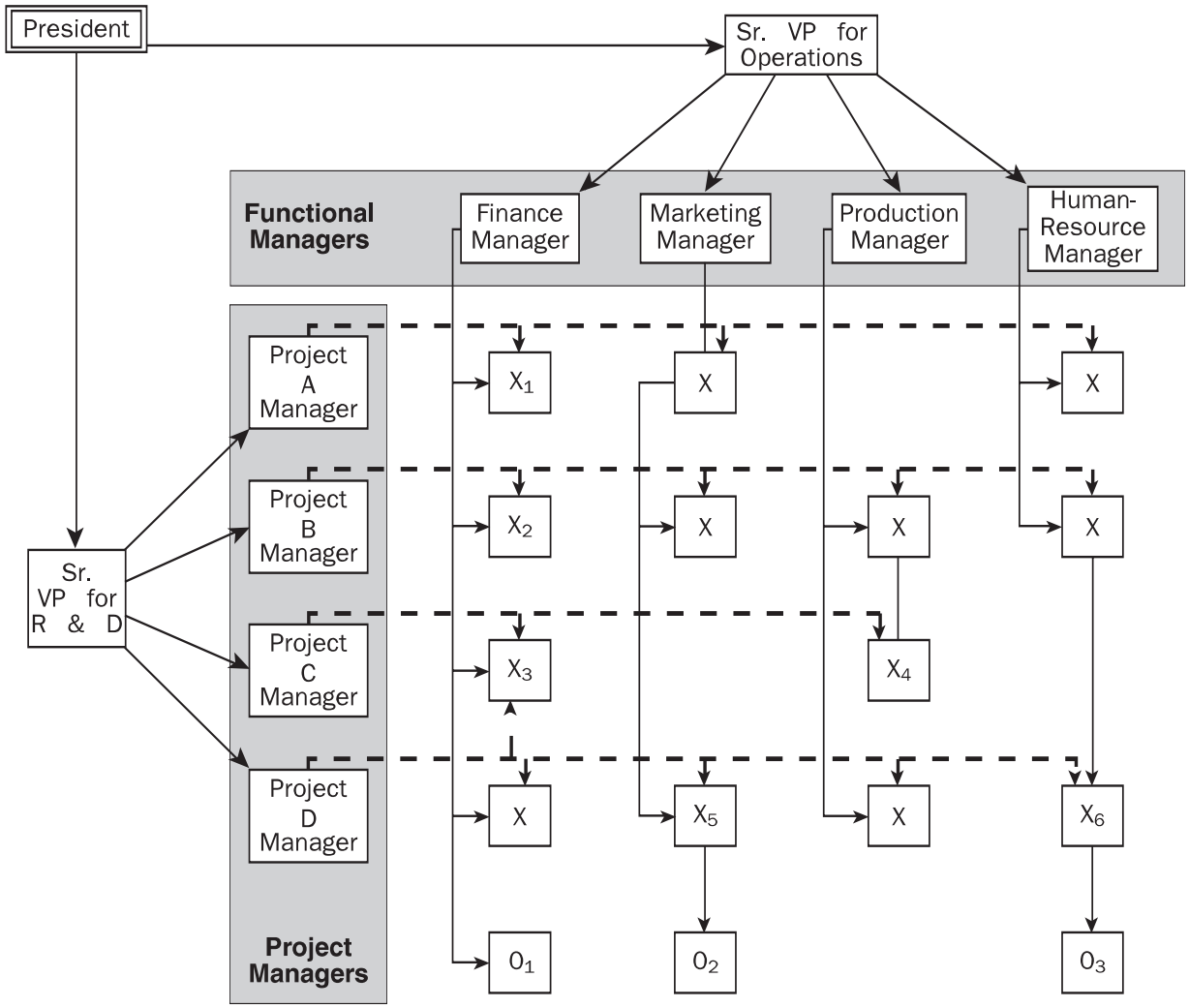
Adams, J.R. (1984). The practice of matrix management. In D.I. Cleland (Ed.), *Matrix management systems.* New York: Van Nostrand Reinhold.

Cleland, D.I. (1984). A kaleidoscope of matrix management systems. In D.I. Cleland (Ed.), *Matrix management systems.* New York: Van Nostrand Reinhold.

Davis, S.M. (1978). Matrix: Filling the gap between theory and practice. In W.W. Burke (Ed.), *The cutting edge: Current theory and practice in organization development.* San Diego, CA: University Associates.

Lawrence, P.R., Kolodny, H.F., & Davis, S.M. (1977, Summer). The human side of the matrix. *Organizational Dynamics*, p. 43.

Moravec, M. (1984). Ensuring high performance in a matrix organization. In D.I. Cleland (Ed.), *Matrix management systems.* New York: D. Van Nostrand



A Hypothetical Matrix-Management Organization

MAYO AND THE HUMAN-RELATIONS MOVEMENT

It is not possible to understand the human-relations movement of the 1930s, 1940s, and 1950s without recognizing that the now-discredited evidence of superiority (in terms of productivity and quality) actually was a philosophical position. Elton Mayo (1919, 1933), a social philosopher, was the major force behind the human-relations school. Mayo was the Harvard University faculty member responsible for the industrial-psychology experiments at Western Electric's Hawthorne plant near Chicago. Mayo himself concentrated on larger social issues, such as *The Human Problems of an Industrial Civilization* (1933). Mayo's student, Fritz Roethlisberger, was more directly involved in the Hawthorne Studies (Carey, 1967; Dickson & Roethlisberger, 1966). From these studies came the term "human relations" and the subsequent movement. Although Mayo did not write a substantial amount about the Hawthorne Studies, he was directly involved in that research, and the results seemed to him to offer clear evidence for his philosophy.

Mayo particularly was opposed to the theory of scientific management as advocated by Taylor (1911). In fact, Mayo's philosophy was shaped partly in response to Taylor's ideas. Mayo wrote, "As a system, Taylorism effects much in the way of economy of labor; its chief defect is that workmen are not asked to collaborate in effecting such economies" (1919, p. 60). He added,

> No social system can be considered satisfactory which deprives the great majority of mankind of every vestige of autonomy. No society is civilized in which the many [work] in the interests of the few. When "work" signifies intelligent collaboration in the achievement of a social purpose, "industrial unrest" will cease to be. (p. 63)

It is interesting to note that the above was written before the Hawthorne studies began and before the term "human relations" was invented. It also is important to recognize that Mayo was not arguing against efficiency or productivity; he was talking about how managers ought to deal with people in the work environment.

REFERENCES

Carey, A. (1967). The Hawthorne studies: A radical criticism. *American Sociological Review, 32,* 403-416.

Dickson, W.J., & Roethlisberger, F.J. (1966). *Counseling in an organization: A sequel to the Hawthorne researches.* Cambridge, MA: Division of Research, Graduate School of Business Administration, Harvard University.

Mayo, E. (1919). *Democracy and freedom: An essay in social logic.* Melbourne, Australia: Macmillan.

Mayo, E. (1933). *The human problems of an industrial civilization.* Cambridge, MA: Harvard University Press.

Taylor, F.W. (1911). *Scientific management.* New York: Harper.

SOURCE

Sashkin, M. (1981). An overview of ten management and organizational theorists. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1981 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

A MODEL FOR INNOVATION

Innovation is critical to organizational success. As business and funding environments become less forgiving, there are increased stresses on organizations to anticipate and adapt to changes. At a time when most organizations are feeling compelled to be innovative, many find that they are not all that proficient as innovators. The resultant scramble to identify successful organizations that could serve as templates for enhancing innovation has—for several reasons—not been very successful. Only a few good examples exist: 3M and Hewlett Packard in the private sector and the Denver Children's Museum in the public sector. Careful study of these examples led, at best, to a set of precepts that were not copied readily. The cultural heritage of both 3M and Hewlett Packard as research-based organizations was identified as the key reason why people found it possible to dabble, to create, and finally to innovate. Because of their quick-fix mentality, many leaders of Western organizations wanted quicker, easier answers.

The entrepreneurial success of the Denver Children's Museum might have served as an innovative beacon for those in not-for-profit and public sectors. However, the culture at Denver Children's was so different from that of other nonprofit organizations that even when the entrepreneurial Denverites packaged and sold their techniques for others to use, few could imitate them successfully.

FACTORS WORKING AGAINST INNOVATION

The reason why so many companies and organizations are very poor at innovation is because of the magnifying impact of a dual problem. The first layer of this problem lies at the individual level. Very few adults show up at their workplaces intrinsically creative. Probably the most universal accomplishment of formal education, public and private, has been the squelching of creativity. We educate in a highly convergent manner, in which right answers are graded, and grades define success and failure. Truth is defined in the back of the teacher's edition of the textbook. The people who do survive the year-in, year-out onslaught of "right answers" and still retain their creativity tend to do so because of a fairly significant degree of deviance. They might have been class clowns or loners whom no one bothered to understand. Seldom were they appreciated by the teachers who had read the "right answers" in their teacher's editions.

People who are creative often are unable to convert their ideas to useful organizational innovation. To understand why this is true, one can look at the difference between creativity and innovation. *Creativity* is the ability to generate ideas—to see options when faced with a challenge. *Innovation* is the practical adaptation of an idea and results in some change in behavior, process, or function. In most organizations, there are many more ideas than innovations. If one examines organizational innovation

at the individual level, it becomes clear that those who are creative often do not know how to make their ideas result in organizational changes. A major reason is that creative employees often have a heritage of being organizationally deviant or are naive regarding the way in which the organization functions. Not only do they not find joy in tinkering with ways to make the organization better; they often do not believe that it can happen. Their creativity has little positive impact, because many of them sit outside the mainstream of organizational life lobbing howitzer-like rounds of ideas at the fortress of the decision makers. In some cases, they even seem to collude in making sure that their ideas are improperly aimed—for fear that the organization might respond and prove them wrong.

Another major reason why employees fail to be innovative is that the organization does not support the process. As any medium or large group tries to organize itself, it creates limiting structures, reward systems, appraisal systems, and lines of authority. The result is a clear message that adherence to structure is strongly desired. Innovation often is seen as a challenge to all the effort that has been put into organizing. The less secure a given manager is, the less comfortable he or she will be with suggestions for change. Whenever middle managers are feeling insecure, it is a particularly treacherous time in which to suggest organizational interventions.

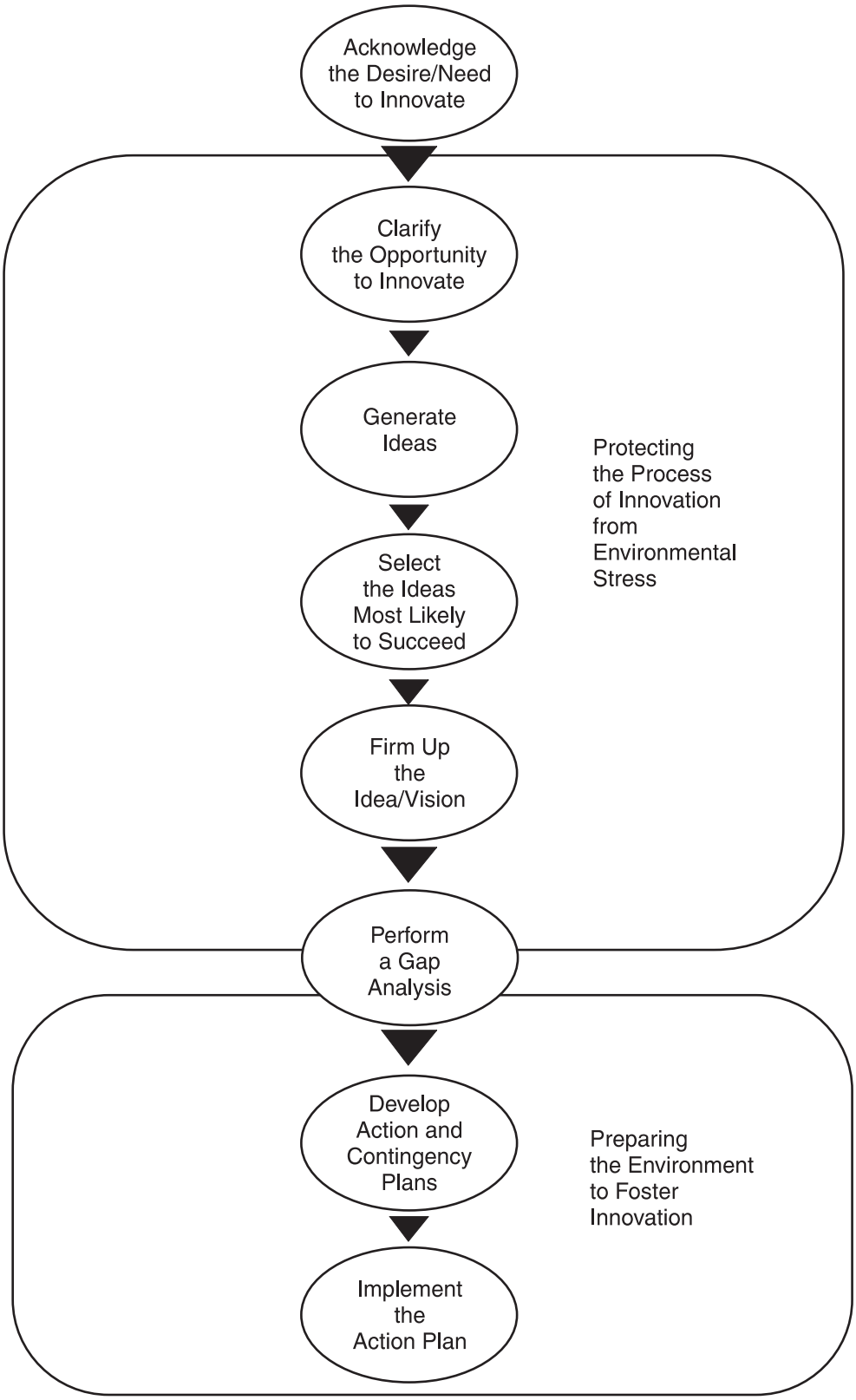
A NEW MODEL FOR INNOVATION

The model for innovation proposed by Nolan and Nolan (1988) graphically represents an approach to enhancing innovation (see figure on next page). The model stresses skill development in the generation of creative ideas and organizational innovation in an environment of organizational support. It addresses both convergent and divergent types of opportunities for change. Although the model is linear, it can serve as a template to better understand an existing process of innovation.

ACKNOWLEDGING THE DESIRE/NEED TO INNOVATE

The first step in the process is the point at which it becomes clear that there is a need to innovate. This might be the result of an organizational mandate, such as that which might result from a strategic-planning process. It may come from an individual or from a small group within the organization. The signal of the need to innovate may be very obvious, coming from significant threats or opportunities outside the organization. Or the felt need to innovate may be much more subtle—a vague feeling that things could be done in a better way. Any of these starting points can become the beginning of a powerful process of innovation.

Whether the process proceeds from this awareness level depends on many variables. Sustained commitment is a critical variable, and another one is whether the individual or organization will sustain its desire to innovate—or if the process will die. More often than not, the process does not continue; inertia keeps both individuals and



A Model for Innovation

organizations proceeding as they have been. All too often they "get over" the belief that change is necessary. Another key variable is the overall climate for innovation, that is, whether the organization nurtures innovative efforts and whether champions are available to carry forward the ideas and programs.

In organizationally mandated change efforts, a critical step is to establish a group to carry the process forward. Which people are asked to serve on the group, how clear their mandate is, and the level of organizational support help to determine both the initial commitment to the process and the ultimate outcome of the effort.

PROTECTING THE PROCESS OF INNOVATION FROM ENVIRONMENTAL STRESS

This aspect of the model addresses the need to give the creative aspects of the process room to flourish. An effort at innovation will perish if it is thrust prematurely into an unforgiving organizational environment before it is fully developed.

Highly successful innovations maintain this status of protection from organizational reality in one of two ways:

1. ***Invisibility either by design or by accident.*** This includes the informal "skunkworks," made popular by Peters and Waterman (1982), in which innovative efforts are fostered by individual tinkerers and champions working outside the system to develop new ways of doing things, new products, and new services. This also is true in mainstream efforts in which no one is tracking the process closely: anonymity enables people to be exempt from the organizational stresses that can kill the not-yet-fully developed idea.
2. ***Protection, by someone in power, from organizational stresses.*** The Fiero automobile project at General Motors is an example of such a case. Intervention by key, upper-middle managers is credited with keeping this project (which was outside the normal GM structure) alive at least three times during its vulnerable stages (Pinchot, 1985).

Clarifying the Opportunity To Innovate

Once the decision to innovate has been made, it is necessary to understand the problem to be solved or the opportunity to be pursued. If the need to innovate stems from a recurring manufacturing problem, it may be helpful to define the problem. If it stems from the desire to innovate, it may be helpful to identify the market need that the organization is seeking to satisfy.

Care must be taken here. In a process that flourishes when those involved are creative, it is easy to begin the process in a way that will overwhelm the people, engender pessimism, and depress creativity. The organization must press for enough clarity to proceed with mutual understanding and enthusiasm but *not* overanalyze the

problem or opportunity. There will be sufficient time for that in later stages of the model.

Generating Ideas

When opportunities need to be opened up, the idea-generation phase is critical. If it is done well, a broad menu of options will be created. Various research on idea generation indicates several important facts:

- The more ideas generated, the higher their overall quality.
- The best ideas tend to be found in the second half of all ideas generated.
- People working individually tend to generate more diverse ideas than do people working as a group.

The drive is to maximize the number and quality of ideas being generated. This is done by the traditional—but often poorly practiced—tenets of brainstorming (that is, accepting all ideas, pushing for quantity, and suspending judgment). It also is enhanced by the use of more specialized and sometimes more structured approaches.

It is most productive when a mixture of group and individual efforts is employed. A problem in brainstorming groups is that judgment almost never is really suspended. "Far-out" ideas may never be expressed. Groups tend to develop patterns in their idea generation. Groups also restrict people's ability to get their ideas out. Logistically, a ten-person group with an hour to spend allows each person only six minutes of time in which to express ideas—if time were distributed evenly.

Operating individually, each person has the full sixty minutes available. Mixing group and individual time greatly increases the number of ideas, the quality of ideas made available, the diversity of those ideas, and the satisfaction of those involved in the generation of ideas.

Selecting the Ideas Most Likely To Succeed

If the idea-generation process is done well, the employees will be faced with the task of selecting from hundreds of ideas those that will best serve their purpose. It is not unusual for a group of eight or ten people to generate five hundred ideas in a period of two to three hours.

At this point, it becomes necessary to determine which ideas are most likely to succeed. This is best done as a multiphase process. The first phase is a raw sort. Each person is asked to pick the top six-to-ten ideas of all those arrayed. This will result in convergence on thirty to fifty of the ideas from the much broader list.

The second phase of selection is to develop criteria for judging the quality of ideas. This includes defining (a) who will have to approve an idea and (b) what factors will be important (for example, implementation and training costs). In this phase, a grid frequently is designed for displaying the best ideas (on the horizontal axis) and the selection criteria (on the vertical axis). The ideas then can be rated easily against each of

the criteria. The group discussion that this grid will generate will be most enlightening. If an individual is working through this process alone, this step can be helpful, because it not only aids in selecting the ideas that are most likely to succeed, but it also helps to define the marketplace or the organizational environment.

Firming Up the Idea or Vision

Many processes of innovation fail at this point. The individual or group has selected its best idea and is ready to turn it over to the organization for implementation. Often, the prospective innovators expect others to be excited by the idea, seize on it, and carry it forward enthusiastically. They believe that the idea will sell itself. This almost never happens.

The idea, however powerful, is more likely to be greeted by yawns and glazed stares. It needs to be nurtured, strengthened, and sold. It is an idea not psychologically owned by anyone other than the people who generated it. It is not understood, and often there are many other "good ideas" floating around. Human and organizational momentum are likely to keep things headed in their current directions. The mere introduction of a new idea is unlikely to overcome this inertia.

To nurture the idea, it is helpful to take it out for carefully controlled test walks, that is, talking about it with people (but not decision makers) who were not involved in the generation of the idea. What may appear clear and obvious to the person who invested so much time in the process may not be easily transmitted. Learning as much as possible about the idea in order to defend it and taking the time to help others to understand the idea will pay off. So will piloting the idea quietly in a corner.

PERFORMING A GAP ANALYSIS

It still is not time to introduce the idea until what might be called the third phase of idea selection, a *gap analysis,* has been completed. This is an effort to analyze the current status of the area of concern and compare it with where the new idea would take it. Such a comparison will help to determine the size of the gap between the current and proposed states.

Up to this point, a good deal of effort has been made to protect the creative process from the organizational environment. Although creativity flourishes in such a protected state, innovation—real organizational or marketplace change—cannot occur in isolation.

A full understanding of the gaps involved in turning the creative idea into an innovation may result in several alternatives:

- The idea may be accepted.
- The idea may be rejected because the gap is too large. Another idea that seems more likely to succeed may be selected.
- An entirely new creative process may be initiated to explore how to close the gap in nontraditional ways.

- It may become clear that more work must be done on the environment prior to the introduction of any idea.

At this stage, it may be helpful to involve others who are particularly effective in managing organizational and marketplace issues. What is most helpful is a champion—someone with a hurdler mentality—to guide the idea forward with zeal.

PREPARING THE ENVIRONMENT TO FOSTER INNOVATION

In the model for innovation, the second large area surrounding the process illustrates the critical role that the environment plays in the success or failure of innovative efforts. Even when the innovative idea is ready to be introduced, like a child being brought into the world, it needs proper care in the form of support and a problem-solving mentality.

For a child to develop fully, it must take risks. In order to become independent adults, children require parents to commit resources, to provide challenges, and to experience stress. In order to succeed at innovation, one must risk challenges to the status quo, significant stress to the parent organization, and even failure.

In the model for innovation, action plans and contingency plans must be developed, and the action plan must be implemented.

Developing Action and Contingency Plans

Once the gap analysis has been completed and an idea selected, an explicit action plan is needed. The process of innovation too frequently falters because of inadequate implementation, which is tied to a lack of action planning. A set of contingency plans also may be needed in case key variables fail to occur exactly as anticipated.

The action plan should be specific. It may involve pilot tests, staged presentations, or whatever is necessary to ensure that the creative idea will become an organizational or marketplace innovation.

Key people who must support the innovation should be integrated into the process at this stage, and the plan probably will need to be readjusted to accommodate their input. A strong champion will not allow the idea to be swallowed up by organizational realities but will push for priority treatment, fruitful compromise, and alternative solutions.

Implementing the Action Plan

It is important that the action plan be implemented with drive and creativity. Although creativity is necessary during the idea-generation stage, it also is required throughout the process. Many more forces will stop or slow a potential innovation than will advance it. The champion—or champions—will be called on regularly to use their creativity in order to continue to move forward.

Drive is important, but timing is crucial in most innovative efforts. Most organizations tend to slow the process of innovation; unfortunately, they often end up with an innovative product or service that is too late to benefit the organization.

Building an organization that fosters innovation is a major effort. It involves decisions about allocation of resources, commitments to the selection and development of human resources, strategic planning, and strategic management. It requires not simply proper management but also high-quality leadership. Nolan and Nolan (1988) found no solid examples of innovative organizations that are devoid of strong leadership—leadership that creates expectations that call for innovation and support.

REFERENCES

Peters, T.J., & Waterman, R.H. (1982). *In search of excellence: Lessons from America's bestrun companies.* New York: Harper & Row.

Pinchot, G., III. (1985). *Intrapreneuring.* New York: Harper & Row.

SOURCE

Nolan, T.M., & Nolan, S.J. (1988). A model for innovation. In J.W. Pfeiffer (Ed.), *The 1988 annual: Developing human resources.* San Diego, CA: Pfeiffer & Company.

OPEN SYSTEMS

According to David Marion (1975), open-systems theory considers *process* (change) to be the primary fact of existence. Open-systems theory states that each action affects all else in some small way, thus sustaining a constant pattern of change. From this perspective, action (or change) in time is real and actual.

Such a view breaks down the common distinctions between tangibles and intangibles. Material things no longer are the only objective realities. Needs, feelings, and relationships are as objectively real as are automobiles and mountains. According to systems thinking, the substance of a thing is not its material nature but its thrust and its direction—its coming to be, realization, and cessation.

Causality

If the substance of a thing is not material but rather is related to change, *cause* becomes less of an isolated event or force and more of a whole, extended situation. The causes of human behavior are not one-way processes. Cause does not move solely from inside, impelling one to act, nor does it come solely from outside. Causes are not external *or* internal; they are both. For example, perceptions are the result both of one's readiness to receive stimuli and of one's selective "filtration" of stimuli. Communication is a mutual function or it is not truly communication.

Fully human activity does not "belong to" prior events. Rather, it develops out of the full, mutually causal participation of individuals in other ongoing systems of events.

GROWTH AND DEVELOPMENT IN THE OPEN-SYSTEM MODEL

The open-system model of growth contrasts sharply with machine-theory views of people and organizations.

Mechanical systems are formed from fixed parts according to a plan. Their order is determined prior to their existence and, to the extent that they are well built, this order provides steady performance. This standardized predictability is highly valued in mechanical systems.

Open systems, however, develop through unique histories. Their order evolves during the course of their existence and, to the extent that they are adaptive, their past histories are carried forward in new efficiencies. Unique events and methods are the hallmarks of open systems.

As an example of an open system, a person's intelligence, sensitivity, and abilities are not original or separable pieces of the individual. Rather, they develop over the course of the person's life and exist only as parts of that person. Likewise, a group's decision-making process, style of communication, and other ways and norms develop

throughout the group's existence; and an organization's structure and methods evolve from the organization's transactions with its changing members and environment.

Order

The conservative, traditional view of order is that it is something given and fixed; society and individuals are closed and unchanging, similar to a machine and its parts. The progressive approach thinks of order as development and change; society and individuals are considered open and developing things, like a game and its plays or an artistic movement and its performances. Mechanical systems are necessarily conservative or fixed in their functioning because the whole is the structure of its parts. In contrast, open systems can progress and develop because the whole can structure or modify its parts. The following table illustrates the main differences between open and mechanical systems.

Open Systems	Mechanical Systems
Parts are flexible.	Parts are fixed.
Whole does not have to equal the sum of its parts.	Whole always equals the sum of its parts.
Even when physical parts do not change, whole can vary depending on intangibles such as mood, style of communication, and so on.	The same physical parts always produce the same whole or result.

Open Versus Mechanical Systems

Three Essential Factors

An individual system—whether a person, a group, or an organization—will develop to the extent that it is an open system. The development of open systems appears to depend on the presence of three essential factors: (a) *rationality,* (b) *steady-state maintenance,* and (c) *feedback.*

Rationality is present to the extent that the system's actions are purposeful and coping. It is absent when actions are disorganized or defensive. Purposeful, coping actions require the integration of system components into an integrated whole and the adaptation of the system to the demands and opportunities of its environment.

Failure to bring the parts together or to adjust to the environment always is reflected in behavior that is repetitive, fixated, or one-sided—*irrational.* In order to make realistic perceptions and effective actions, the system must use all of its powers of feeling, thinking, imagining, willing, and doing.

Maintenance of a steady state concerns the system's ability to accumulate and utilize resources. Open systems make use of the following resources:

- ***Materials;***
- ***Energy;*** and

- ***Information differentials*** or ***bound tensions.***

As an open system develops, it becomes highly differentiated: The different parts or phases of the system come to vary or differ from one another. These differences produce creative tensions that represent sources of action and powers of change. For example, when a person's needs, abilities, and interests; a group's leadership and interactional modes; or an organization's operating and communication patterns are varied and integrated, effective powers of action are likely to be present.

Feedback reflects the system's ability to generate and utilize evaluative information. Without such information, the system is blind to itself and to the consequences of its actions. Rationality and steady-state maintenance are not automatic, fixed things; rather, they are dynamic sets of ever-changing relationships. Monitoring and modifying these interactions require information through feedback. Such feedback will be produced if, in the action of the system, there is a progressive cycling through the phases of problem identification and problem solving. A self-guiding and self-maintaining system depends on such a process. The field of science is a primary example of a social system that is able to utilize self-guiding information. Scientific development is understood to be the progressive, reciprocal use of problem identification and problem solving, theory and experience, hypothesis and experiment, concept and data.

IMPLICATIONS FOR ORGANIZATIONS AND INDIVIDUALS

Both organizations and individuals, threatened by the rate, intensity, and radical nature of change, have placed excessive emphasis on problem solving, information, and control. Often out of irrational needs for power and for certainty, organizations and individuals tend to neglect the counterparts of the above processes: problem identification, involvement, and consensus. As a result of these imbalances, tensions become destructive rather than creative, and the ability of individuals, groups, and organizations to function in an integrated and adaptive manner decreases. Marion (1975) asserts that individuals, groups, and organizations must learn to function and develop as open systems in order to cope with increasingly rapid rates of change.

SOURCE

Marion, D.J. (1975). Open systems. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1975 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

Open Systems	Mechanical Systems
Parts are flexible.	Parts are fixed.
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Open Versus Mechanical Systems

OPEN-SYSTEMS THEORY

Traditional theories of organization tend to consider organizations as *closed systems* (resistant to the influences of environmental demands). Such a position suggests that organizational environments have little, if any, effect on organizational functioning. However, Daniel Katz and Robert Kahn (1978) suggest that a closed-systems view is inaccurate because it fails to recognize the dependency between an organization and its environment. Closed-system views fail to understand that organizations are in fact *social systems and social structures.* As social systems and social structures, organizations are characterized by two fundamental social and behavioral patterns:

- ***Systemic attributes*** (input, throughput, and output) and
- ***Openness to the environment.***

Thus, in order to understand an organization, one must understand the relationship between the organization and its energy sources within its environment.

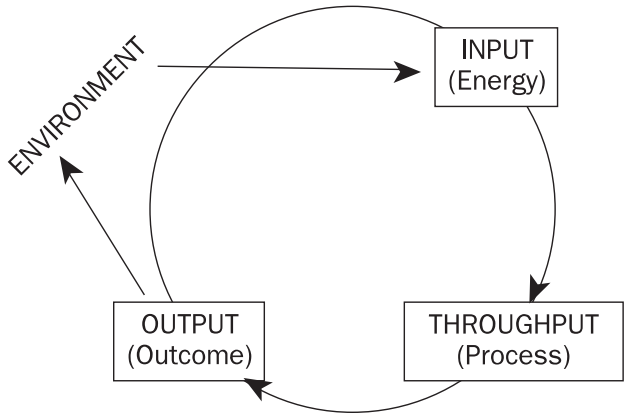
SYSTEMIC ATTRIBUTES

In concept, *systems* are interrelated processes that function together to achieve a common purpose. For example, the human body contains biological, physiological, and psychological processes, all working together in order to produce an independently functioning person. An important attribute of systems is that all processes depend on one another in order to function at optimal levels. Therefore, a change in one function produces predictable changes in other functions and, ultimately, changes the entire system. Organizations are similar to the human body in that they are composed of interdependent processes.

Open-systems theory emphasizes three major areas—*input, throughput, and output*—that can be visualized as a continual and ongoing cycle (see figure titled "The Input-Throughput-Output Cycle").

Input

Systems receive *input* from their environments *(energy sources)*. Examples of human systems inputs are food and psychological nourishment; examples of organizational inputs are raw materials, people, capital, and plants. Input provides the system with the energy it needs to maintain itself and to perform its function. A fundamental assumption of open-systems theory is the concept of *entropy*—that without a continued input of energy from the environment, no system has the ability to sustain itself.



The Input-Throughput-Output Cycle

Throughput

Another major focal point of open-systems theory is *throughput:* the internal transformation of input into system outcomes that then are used by some outside group or system. In an organizational sense, transformational processes necessarily involve the organization of people in the system and therefore are social in nature.

Output

Outputs are system outcomes. System outputs are exchanged within the environment for additional energy and subsequently become inputs and sources of energy for other systems. For example, organizations typically produce products and services as their outputs. Products and services are exchanged in the marketplace (environment) for money, which then is used to purchase additional input (energy) in order to sustain the organization's transformational processes. The purchased products and services are imported into another system, where they are transformed into another form of output.

Thus, any given system can be identified through a careful examination of its relationship with the environment and of its input-throughput-output cycle. Katz and Kahn point out that the relationship between system and environment is *transactional* and inconsistent. Accordingly, the nature of the environment (stable, volatile, and so on) has serious implications for the system-environment relationship.

CHARACTERISTICS OF OPEN SYSTEMS

Katz and Kahn (1978) note that all open systems, as social structures, share several characteristics that are not evident in other kinds of systems—biological systems, for example. The following ten characteristics describe *all open systems.*

1. ***Importation of Energy.*** Open systems are characterized by a need to import some form of energy from the environment. Thus, open systems are heavily dependent on the environment for new and renewed sources of energy. Open

systems are social structures, and no social structure can be completely self-sufficient or self-contained.

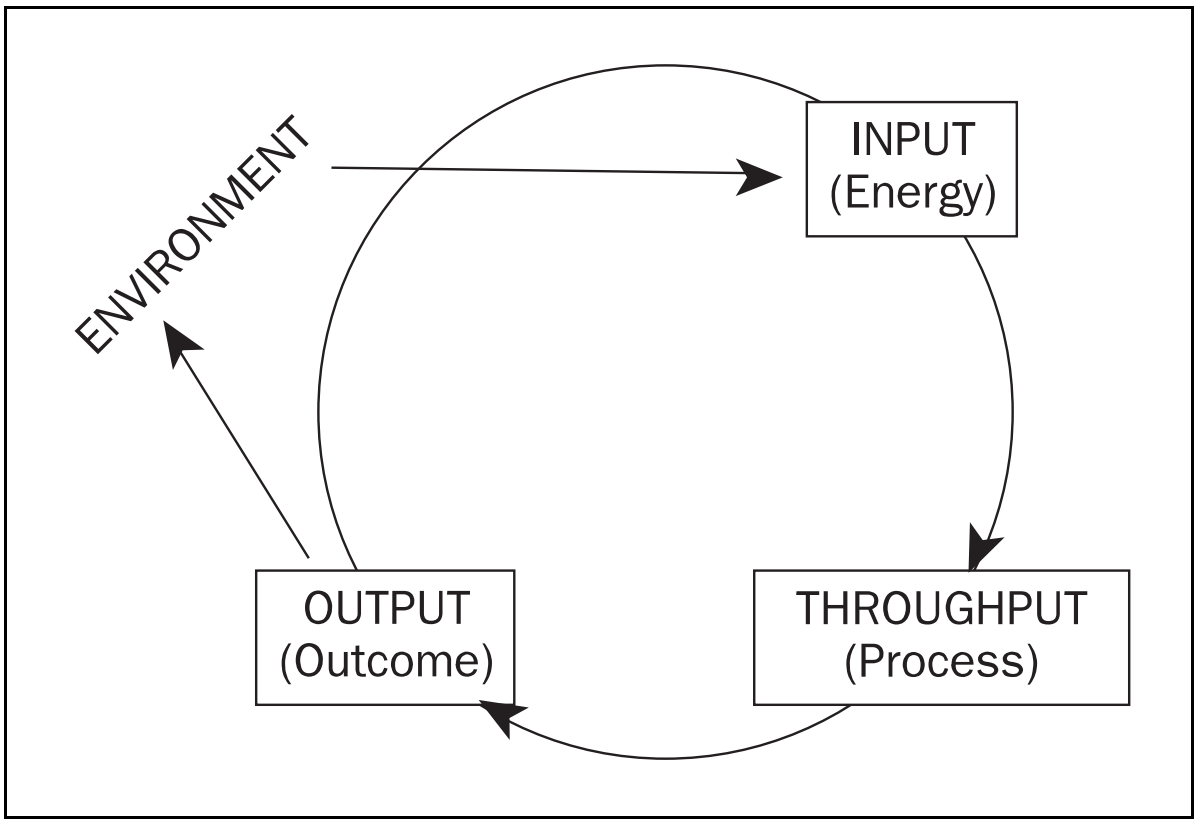
2. ***Throughput.*** Open systems transform the imported energy that is available to them into usable outputs. Throughput involves a reorganization of energy; it is the work that gets done in the system.
3. ***Output.*** Open systems export transformed energy into the environment for use by other systems. The success of the system's output depends on how well the output is accepted by the environment.
4. ***Systems as Cycles of Events.*** The energy exchange between environment and system, the exchange between system and environment, and the energy transformation within the system are cyclic in nature. That is, outcomes exported to the environment furnish energy for the repetition of the cycle. Cycles of events imply relationships among parts and events.
5. ***Negative Entropy.*** If they are to survive, systems must be aware of the amount of energy that is lost during natural processes and must attempt to compensate for the tendency of things to wind down over time. All systems must ensure that energy is replenished and that the input-throughput-output cycle continues. This often is accomplished by importing more energy than is needed, thereby creating reserves and margins for operation. In this sense, the input-throughput-output cycle is a *negative-entropy system.*
6. ***Information Input, Negative Feedback, and Coding Processes.*** Not all input from the environment is direct energy. Some input is informational, producing indicators of what is happening in the environment and what is happening with the system in relation to the environment. The basic form of informational input is *negative feedback* from the environment. Negative feedback is corrective in that it allows the system to determine whether too much energy is being expended in inappropriate areas of the system. Informational input is selective, and coding processes work to filter unnecessary information, to reduce confusion, and to sort environmental information into meaningful categories.
7. ***Steady-State and Dynamic Homeostasis.*** Systems require the importation of energy to inhibit entropic processes and to maintain a steady state of energy exchange (a system character and a stable ratio of inputs to outputs). Katz and Kahn relate this concept to the temperature of the human body: Although outside conditions may change, the body makes internal adjustments in order to maintain a temperature of approximately 98.6 degrees Fahrenheit. A steady state does not imply the absence of motion; the system experiences ups and downs and does not always return to the same place once adjustments have been made. Growth and expansion occur, yet basic ratios and the system character remain the same.
8. ***Differentiation.*** Systems move toward differentiation, in which general patterns are replaced with more specialized functions. Additional roles are specified for a

growing number of parts. In organizational systems, departmentalization and job specialization result from differentiation.

9. ***Integration and Coordination.*** As differentiation continues, the system responds with processes that enable the components of the system to function in a unified manner. Katz and Kahn note that in smaller organizational systems, integration is achieved through shared norms and values, while in large organizational systems, unification most often is achieved through the coordination of multiple functions (setting priorities, scheduling, and the like).
10. ***Equifinality.*** The concept of equifinality asserts that the same outcome can be reached through different internal states and directions and through a variety of means and methods. Katz and Kahn state that, as open systems grow and evolve into regulatory processes, equifinality may be reduced.

REFERENCE

Katz, D., & Kahn, R.L. (1978). *The social psychology of organizations* (2nd ed.). New York: John Wiley.



The Input-Throughput-Output Cycle

ORGANIZATIONAL CLIMATE

Daniel Katz and Robert L. Kahn (1978) observed that organizations with different forms and functions, "although they share certain bureaucratic activities and norms, develop different and distinctive normative climates." Just as people's unique personalities make them somewhat consistent in their preferences and in their behavioral responses, organizations have unique climates that reflect their preferences and typical behavioral responses. Managers and organization development (OD) consultants can assess these climates in order to predict or to improve factors such as productivity and morale.

Several researchers have attempted to define the term *organizational climate.* Richard Woodman and Donald King (1978) set forth an assortment of definitions in their review of the organizational-climate literature. Garlie Forehand and B. Von Haller Gilmer (1964) define organizational climate as

> ...the set of characteristics that describe an organization and that (a) distinguish the organization from other organizations, (b) are relatively enduring over time, and (c) influence the behavior of people in the organization. (p. 362)

Like meteorological climate, organizational climate is a combination of attributes considered over time and space. Just as the physical climate of a region is composed of factors such as average rainfall, average temperature, and wind conditions, an organization's climate is composed of its decision processes, overall morale, general reputation in the community, and standards of conduct.

Any generalization about an organization's climate must be considered in the context of what units or subunits are under consideration. It occasionally snows in the Grand Canyon, but this does not mean that Arizona has an arctic climate. Similarly, standards of behavior might be very casual on the loading dock of an IBM production plant, but this does not necessarily imply that all of IBM has a casual climate.

Descriptions of an organization's climate are subject to criticism because they rely heavily on subjective judgment. Early organizational-climate researchers finessed this measurement issue by creating artificial groups of subjects and by manipulating the climate as an independent variable in their experiments. For example, in their classic study of the effects of various leadership styles on boys' groups, Lewin, Lippitt, and White (1939) created groups with democratic, authoritarian, and laissez-faire climates by varying the supervisory styles and boundaries set by the leaders.

Other researchers have chosen to study organizational climate in naturally existing groups, either because they believed that methodology would yield more valid scientific findings or because they followed an action-research orientation that seeks to produce practical effects on real-life situations. The vast majority of OD consultants and managers prefer to study the climate of actual, not experimental, organizations. When organizational climate is studied in actual organizations, researchers attempt to measure

the climate as it exists at various points in time rather than to manipulate it. Organizational surveying is one of the primary methods used by researchers to measure climate (Litwin & Stringer, 1968; Dieterly & Schneider, 1974). Often, this means that the measurements obtained are of *members' perceptions of the climate* rather than of the climate itself.

ORGANIZATIONAL CLIMATE: A DIFFERENT NAME FOR JOB SATISFACTION?

Robert M. Guion (1973) posed the question of whether measurements of organizational climate, because they are derived from organizational members' perceptions, might be redundant measurements of job satisfaction. For academic researchers and hands-on OD consultants, the motive for examining organizational climate usually is to determine or to alter the climate's effects on variables such as performance or job satisfaction. If organizational climate and job satisfaction are identical, then the OD consultant would be similar to a physician who cures patients by helping them to get well.

However, Benjamin Schneider (1975) did find a way to distinguish between job satisfaction and organizational climate. Like other researchers, he compared measurements of meteorological climates and organizational climates. People might say that a region is humid, balmy, arctic, or rainy. When they do so, they generally are *describing* one or more of the attributes of the region's climate. They are not *evaluating* the region's weather by making statements such as, "I hate the humidity in Houston" or "I love April in Paris." Similarly, by saying, "The atmosphere in this company fosters experimentation and creativity," a person would be *describing* the organization in terms of a perception of its climate. If that person also were to say, "I like this job much better than my old one because I'm allowed to work on my own projects," that person would be *evaluating* the company in terms of his or her level of job satisfaction. If another person at the same company were to say, "It drives me nuts that nobody tells us what to do around here," he or she also would be expressing a degree of job satisfaction. Despite their unequal levels of satisfaction, the two employees probably would describe the company similarly enough to paint a fairly accurate portrait of the organization for an outsider. Schneider asserts that people in an organization do not necessarily have similar measures of job satisfaction but they do tend to provide similar descriptions of the organization's climate.

The challenge, therefore, is to devise methods of assessment that do not confuse organizational climate with job satisfaction. Schneider says that this can be done by designing survey questions that elicit descriptions of the organization and its practices rather than evaluations of how much the person likes the organization and the job.

COMPONENTS OF CLIMATE

Organizations are complex social arrangements, and instruments that measure organizational climate express this complexity. Udai Pareek (1989) observes that organizational climate is created by the interaction of an organization's "structure, systems, culture, leader behavior, and psychological needs of employees" (p. 161). From a review of studies by Likert (1967), Litwin and Stringer (1968), and others, Pareek (1989) identifies the following twelve dimensions of organizational climate:

1. ***Orientation:*** members' principal concern (control, excellence, and so on);
2. ***Interpersonal relations:*** such as cliques or dependency;
3. ***Supervision:*** supervisors' influence on employee motivation;
4. ***Problem management:*** how the organization views and solves problems;
5. ***Management of mistakes:*** leaders' attitudes toward subordinates' errors;
6. ***Conflict management:*** processes used to resolve conflict;
7. ***Communication:*** prevalent styles and characteristics of communications;
8. ***Decision making:*** how decisions are made and by whom; how the decision making process affects relationships;
9. ***Trust:*** who trusts whom for what;
10. ***Management of rewards:*** what behaviors are reinforced;
11. ***Risk taking:*** the organization's way of handling risky situations; and
12. ***Innovation and change:*** who is responsible for instigating change, by what methods, and to what effect.

ADVANTAGES OF ORGANIZATIONAL-CLIMATE METHODOLOGY

One advantage of using climate measures to assess organizational functioning is that the twelve dimensions identified above are relatively less threatening than are questions of satisfaction and other evaluative measures. Observers or organization members are asked to describe the organization in neutral terms, not to evaluate it.

A second advantage of using climate measures is that organizational climate is thought to be a predictor of performance outcomes. Research conducted by Litwin, Humphrey, and Wilson (1978) showed that traditional indicators of how well an organization is doing, such as profitability and return on investment, occur long after the individual efforts that created them. "Climate, on the other hand, is a short-term indicator of organizational performance, for it measures current activities and their ultimate impact on bottom-line performance" (p. 188).

USES OF ORGANIZATIONAL-CLIMATE MODELS

Organization-development consultants and managers can apply organizational-climate models to problems in at least four ways:

1. Organizational climate is a useful construct within which to *monitor the effects of organizational-change* programs. Assessing the climate at various times—before, during, and after an intervention—allows people to track the effects of planned change.
2. The system-wide effects of contemplated changes in mission, policies, technology, or personnel *can be predicted* in advance in the context of an organizational-climate analysis.
3. *Differences among subunits of an organization can be better understood* in the framework of organizational-climate theory. If climate diversity is natural and healthy, this knowledge can be used to promote more efficient cooperation among dissimilar subunits. Alternatively, the information can be used to diagnose possible deficiencies when dysfunctional diversity is detected.
4. Organizational-climate theory is a particularly valuable tool for managers and OD consultants because it *broadens their focus from individual to group.* It is important to remember that the whole of an organization is greater than the sum of its parts—or at least is *different* than the sum of its parts. The desire to exploit the benefits of group synergy is a fundamental reason for forming an organization. Organizations function in accordance with the principles of group dynamics, not according to the principles of individual behavior. In order for an OD consultant or manager to implement organizational improvement successfully, he or she must understand that organizational psychology is group psychology, not individual psychology. The concept of organizational climate provides an orderly, theoretical framework for examining and for attempting to influence the behavior of work groups.

REFERENCES

Dieterly, D., & Schneider, B. (1974). The effect of organizational environment on perceived power and climate: A laboratory study. *Organizational Behavior and Human Performance, 11,* 316-337.

Forehand, G.A., & Gilmer, B.V.H. (1964). Environmental variation in studies of organizational behavior. *Psychological Bulletin, 62,* 361-382.

Guion, R.M. (1973). A note on organizational climate. *Organizational Behavior and Human Performance, 9,* 120-125.

Katz, D., & Kahn, R.L. (1978). *The social psychology of organizations* (2nd ed.). New York: John Wiley.

Lewin, K., Lippitt, R., & White, R.K. (1939). Patterns of aggressive behavior in experimentally created "social climates." *Journal of Social Psychology, 10,* 271-299.

Likert, R. (1967). *The human organization.* New York: McGraw-Hill.

Litwin, G.H., Humphrey, J.W., & Wilson, T.B. (1978). Organizational climate: A proven tool for improving performance. In W.W. Burke (Ed.), *The cutting edge: Current theory and practice in organization development.* San Diego: Pfeiffer & Company.

Litwin, G.H., & Stringer, R.A., Jr. (1968). *Motivation and organizational climate.* Boston: Division of Research, Harvard Business School.

Pareek, U. (1989). Motivational analysis of organizations-climate (MAO-C). In J.W. Pfeiffer (Ed.), *The 1989 annual: Developing human resources*. San Diego, CA: Pfeiffer & Company.

Schneider, B. (1975). Organizational climate: An essay. *Personnel Psychology, 28,* 447-449.

Schneider, B. (1983). Work climates: An interactionist perspective. In N.W. Feimer & E.S. Geller (Eds.), *Environmental psychology: Directions and perspectives.* New York: Praeger.

Woodman, R.W., & King, D.C. (1978). Organizational climate: Science or folklore? *Academy of Management Review, 3,* 816-826.

1. Orientation
2. Interpersonal Relations
3. Supervision
4. Problem Management
5. Management of Mistakes
6. Conflict Management
7. Communication
8. Decision Making
9. Trust
10. Management of Rewards
11. Risk Taking
12. Innovation and Change

Pareek's Twelve Dimensions of Organizational Climate

ORGANIZATIONAL CULTURE

Organizational culture is a relatively new type of organizational analysis that is borrowed from the field of anthropology. It first was described as an organizational unit of concern by Pettigrew (1979). In the short time since culture and its relevance to organizational systems have been matters of academic and professional concern, many books and articles have been written to define and to describe the nature of organizational culture. To date, no single, universally accepted definition exists; however, the term *organizational culture* generally is accepted as referring to the shared meanings, beliefs, and understandings held by a particular group or organization about its problems, practices, and goals (Reichers & Schneider, 1990).

Edgar Schein (1985) contends that the concept of organizational culture often is misunderstood and is confused with the related concepts of climate, ideology, and style. For example, culture sometimes is defined in terms of:

- ***Overt organizational behavior;***
- ***Organizational ideology and philosophy;***
- ***Group and organizational norms;***
- ***Espoused organizational values;***
- ***Policies, procedures, and rules of socialization;*** and
- ***Climate.***

When considered in conjunction with members' interaction patterns, language, themes of everyday conversation, and rituals of daily routine, these definitions seem to reflect elements of organizational culture. But for Reichers and Schneider (1990) as well as for Schein, culture is less conscious; it exists at a deeper level. These theorists regard the above definitions as artifactual and resulting from culture. None describe the "essence of culture" itself. According to Schein, the essence of culture is the basic assumptions and beliefs that are "invented, discovered, or developed" by all members of a group as it copes "with its problems of external adaptation and internal integration" and which are "taught to new members as the correct way to perceive, think, and feel in relation to those problems" (1985, p. 9).

Morgan (1986) contends that organizational cultures evolve from the social practices of members of organizations and are, therefore, socially created realities that exist in the heads and minds of organizational members as well as in the formal rules, policies, and procedures of organizational structures. For Morgan, culture is an ongoing process of reality construction, providing a pattern of understanding that helps members of organizations to interpret events and to give meaning to their working worlds. Thus,

culture is an evolutionary and dynamic process that incorporates changing values, beliefs, and underlying assumptions regarding:

- ***The nature of the relationship between organization and environment*** (whether the organization controls, is controlled by, or coexists with the environment);
- ***The nature of reality and truth*** (what is right or wrong in terms of acquisition and use of information, time perspectives, physical environments, and social environments);
- ***The nature of human nature*** (intrinsic nature and basic instincts of human beings);
- ***The nature of human activity*** (active, passive, or in-between); and
- ***The nature of human relationships*** (the proper way for people to relate to one another).

The above are fundamental assumptions about core and global realities that result in *cultural predispositions* that subsequently drive the more "superficial" cultural manifestations such as overt behavior, norms, espoused values, and the like.

FUNCTIONS OF ORGANIZATIONAL CULTURES

Schein (1985) believes that organizational cultures initially are created by the founders of organizations and subsequently are maintained by the founders' chosen leaders. Founders form organizations based on personal beliefs about how to interact with the environment and about the natures of reality, people, activities, and relationships. They make presumptions about what should or should not be, what works or does not work, and what constitutes appropriate or inappropriate organizational activity. Founders' goals, assumptions, and visions of reality come to be shared by others in their organizations, particularly the leaders. Over time, shared realities evolve into consensually validated organizational cultures that become the "correct" ways of solving organizational problems related to survival and adaptation to the external environment and to integration of the internal processes required to ensure survival and adaptation.

Thus, organizational culture becomes a *normative glue* (Morgan, 1986) that structures the milieu and makes it possible for people to derive meaning from their work, to work comfortably with others, and to focus on key organizational tasks.

IMPLICATIONS

Morgan believes that corporate cultures are mini-societies that manifest distinct patterns of thought, behavior, and belief. Similarly, Schein (1985) says that organizational cultures are highly visible and that they facilitate adaptation to the external environment as well as integration of internal processes. Adaptation and integration imply differences in environmental conditions and a degree of organizational-environmental fit. Culture

can limit strategic options significantly and, consequently, can restrict the organization's ability to assess and to adapt to certain environments—so much so that Weick (1985) has asserted that it is becoming increasingly difficult to separate *strategic change* from *cultural change*.

For Schein, it is clear that organizations must analyze their cultures and manage within their cultural boundaries. If the fit between culture and environment is inappropriate, organizations must change their cultures. Yet in order to manage effectively within boundaries or to change cultures, leaders and managers must learn to perceive the types of systems with which they are working. Successful leadership depends on an ability to create or to maintain a shared reality, as cohesive groups evolve from shared reality and meaning (Morgan, 1986). Shared reality and meaning will be created or maintained only when leadership and management is symbolically consistent with some desired direction. In other words, culture cannot be controlled; it only can be influenced by leadership and managerial behavior.

REFERENCES

Morgan, G. (1986). *Images of organization.* Newbury Park, CA: Sage.

Pettigrew, A.M. (1979). On studying organizational culture. *Administrative Science Quarterly, 24,* 570-581.

Reichers, A.E., & Schneider, B. (1990). Climate and culture: An evolution of constructs. In B. Schneider (Ed.), *Organizational climate and culture.* San Francisco: Jossey-Bass.

Schein, E.H. (1985). *Organizational culture and leadership.* San Francisco: Jossey-Bass.

Weick, K.E. (1985). The significance of corporate culture. In P. Frost, L.F. Moore, M.R. Louis, C.C. Lundberg, & J. Martin (Eds.), *Organizational culture.* Newbury Park, CA: Sage.

ORGANIZATIONAL NEUROSES

In a unique approach to the diagnosis of organizational problems, Kets de Vries and Miller (1984) apply the studies of psychoanalysis and human pathology to organizational dysfunctions. Instead of examining organizations through policies and procedures, Kets de Vries and Miller "examine the *human* psychological roots of organizational strategy, structure, group processes, and leadership....we make use of psychoanalytically based models of the mind" (1984, p. xi).

Kets de Vries and Miller believe that problematic organizational climates, dysfunctional patterns of interaction, and so on, can be traced to one of several classic psychological patterns of neurosis. This is not to say that organizations with problems are composed of mentally ill people; rather, Kets de Vries and Miller assert that many neuroses are common, not incapacitating, and treatable.

FIVE TYPES OF NEUROTIC ORGANIZATIONS

Kets de Vries and Miller discovered five types of neurotic organizations:

- ***Paranoid;***
- ***Compulsive;***
- ***Dramatic;***
- ***Depressive;*** and
- ***Schizoid.***

All can be traced to what Kets de Vries and Miller term the organization's *dominant neurotic style.* Dysfunctional organizations acquire neurotic styles in various ways. Often, the leaders' personal neuroses permeate the organizational culture, because most executives hire people similar to themselves. The neurosis can become a vicious cycle, as people who are attracted to the organization and who want to work there are likely to possess similar characteristics. Organizations whose leaders are very dominant and who control most of the power are especially prone to neuroses because the leaders exert great influence over the organization's structure and culture. If these leaders suffer from neuroses, the chances are that the entire organization will, too.

Paranoid Organizations

Paranoid organizations often are run by managers who are widely suspicious of others. Because they are convinced that others are plotting against them, trying to unseat them, and so on, such managers place a great deal of emphasis on organization-wide

intelligence systems. Paranoid managers are concerned with control and with challenges to their authority and to the organization's position. Because they distrust others, they attempt to control them through tight budgets, regulations, and so on.

Paranoid organizations tend to have overly analytical decision-making processes, because they want to assess the implications of each potential "threat." They usually are conservative in nature and react to problems rather than creating solutions. Power in such organizations is held by only a few people; subordinates are not trusted enough to be given authority or responsibility.

Compulsive Organizations

Rituals and routines drive the compulsive organization. Emphasis is placed on conformity and procedure. Kets de Vries and Miller state that compulsive organizations are similar to paranoid organizations in that both need formal systems of control in order for people to feel secure. The difference between the two is that paranoid organizations stress *internal* controls, and compulsive organizations stress *external* controls.

The organizational hierarchy is strictly enforced in compulsive organizations. Compulsive leaders are worried about losing control; the hierarchy helps to ensure that they will retain their "deserved" power. Such leaders loathe surprises and fear uncertainty; thus, they spend a great deal of time planning and strategizing down to the last detail.

Compulsive organizations usually have a particular area of specialty in which they excel—at least for a while—and often dominate their competitors both in sales and in size. Unfortunately, they often fixate on what they do best and fail to consider any improvements or changes that their competitors might be making. In the end, the organization that once was a giant in its field may fall to a smaller, more innovative company whose products have become more attractive to consumers than the compulsive organization's "standard of excellence."

Dramatic Organizations

As the name indicates, dramatic organizations are bold, uninhibited, and a little wild. Leaders rely more on intuition than on statistics, and risk taking is the norm rather than the exception. Like paranoid and compulsive leaders, dramatic leaders centralize their authority—but not to maintain control. Instead, the dramatic leader uses power to change the organization to gain personal recognition. The leader may start new ventures, drop old ones, and sink the company deeper and deeper into debt, in the interest of growth and status. Perhaps inevitably, the business endeavors are not always compatible or carefully thought through. The organization grows too quickly; lower-level managers do not have enough time or influence to research decisions; and communication systems are not adequate or widespread enough.

Depressive Organizations

People who suffer from clinical depression are plagued by feelings of listlessness, of being unable to change their situations, and by poor self-esteem. Depressive organizations "feel" much the same way. Managers act as if there is nothing that they can do to change the organization's course or to improve it. There is practically no activity—certainly no innovation—within the organization; only routine, programed tasks are accomplished. Such organizations are bureaucratic and conservative; they can survive only in an unchanging environment.

Although depressive organizations are governed by hierarchies, no manager—not even the chief executive officer—feels powerful. Such organizations suffer from what Kets de Vries and Miller call a *leadership vacuum.* Things get done because of structures and procedures, not because of effective leadership. The leaders seem to believe that there is nothing they can do to make things better.

The other distinguishing characteristic of the depressive organization is that it rarely looks outside itself for information. Its passive nature and unwillingness (or inability) to study or to compete in the marketplace renders it incapable of keeping up with developments in technology, economic changes, and so on.

Schizoid Organizations

Like depressive organizations, schizoid organizations suffer from leadership vacuums. Their leaders do not want to get involved with the competition, with the marketplace, and so on; therefore, they frown on interaction. Schizoid leaders tend to be unhappy and frustrated. They are convinced that things will not go well for them and that people will hurt them, so they daydream rather than act.

Seizing on the opportunity to gain power and influence, many executives just below the top of the organizational hierarchy use political tactics to obtain favors from the inactive leader and to influence him or her in various ways. Subsequently, the organization becomes bogged down in battles for favoritism and in backstabbing. The organization ceases to be a cohesive whole; little energy is given to working together or to directing the organization's future. Rather, the executives expend their energy for personal gain, there is fighting instead of teamwork, and any changes that happen within the organization are likely to be insignificant.

The following table summarizes the five neurotic organizational styles.

IMPLICATIONS FOR ORGANIZATIONS

Organizations in which power is held by numerous people are far less likely to succumb to one of the five neuroses. Due to the diversity of the people in power, individual neuroses are less likely to taint the organizational culture. The organizations that are in danger are those in which most of the power is held by one person. Most people manifest some sort of neurotic tendencies, however minor; if the chief executive's neuroses are of greater consequence, they will affect who that person hires, how he or

she will interact with others, how decisions are made, and so on until the neuroses permeate the organizational culture. People who can adapt to the neuroses are more likely to be hired and to remain with the organization; those who cannot are more likely to be terminated or to resign. The organization's neurosis therefore becomes self-perpetuating over time.

Kets de Vries and Miller (1984) point out that not all organizational problems are caused by neuroses; inappropriate policies and unwise decisions also can be deadly pitfalls. One can distinguish between policy/decision problems and neurosis problems by examining the symptoms. Problems related to policies and decisions show up through a series of apparently isolated events. In contrast, neurosis-related problems color all of the organization's symptoms. Everything that is wrong with the organization can be traced to the chief executive's neurosis.

REFERENCE

Kets de Vries, M.F.R., & Miller, D. (1984). *The neurotic organization: Diagnosing and changing counterproductive styles of management.* San Francisco: Jossey-Bass.

Neurotic Style

Key Factor	Paranoid	Compulsive	Dramatic	Depressive	Schizoid
Characteristics	Suspiciousness and mistrust of others; hypersensitivity and hyperalertness; readiness to counter perceived threats; over-concern with hidden motives and special meanings; intense attention span; cold, rational, unemotional.	Perfectionism; preoccupation with trivial details; insistence that others submit to own way of doing things; relationships seen in terms of dominance and submission; lack of spontaneity; inability to relax; meticulousness; dogmatism; obstinacy.	Self-dramatization; incessant drawing of attention to self; narcissistic preoccupation; a craving for activity and excitement; alternating between idealization and devaluation of others; exploitativeness; incapacity for concentration or sharply focused attention.	Feelings of guilt, worthlessness, self-reproach, inadequacy; sense of helplessness and hopelessness—of being at the mercy of events; diminished ability to think clearly; loss of interest and motivation; inability to experience pleasure.	Detachment, noninvolvement; withdrawnness; sense of estrangement; lack of excitement or enthusiasm; indifference to praise or criticism; lack of interest in present or future; appearance cold, unemotional.
Fantasy	I cannot really trust anybody; a menacing superior force exists that is out to get me; I had better be on my guard.	I don't want to be at the mercy of events; I have to master and control all the things affecting me.	I want to get attention from and impress the people who count in my life.	It is hopeless to change the course of events in my life; I am just not good enough.	The world of reality does not offer any satisfaction to me; my interactions with others will eventually fail and cause harm, so it is safer to remain distant.
Dangers	Distortion of reality due to a preoccupation with confirmation of suspicions; loss of capacity for spontaneous action because of defensive attitudes.	Inward orientations; indecisiveness and postponement; avoidance due to the fear of making mistakes; inability to deviate from planned activity; excessive reliance on rules and regulations; difficulty seeing "the big picture."	Superficiality, suggestibility; the risk of operating in a nonfactual world—actions based on "hunches"; overreaction to minor events; others may feel used and abused.	Overly pessimistic outlook; difficulties in concentration and performance; inhibition of action; indecisiveness.	Emotional isolation causes frustration of dependency needs of others; bewilderment and aggressiveness may result.

Summary of the Five Neurotic Styles

Adapted from M.F.R. Kets de Vries & D. Miller, *The Neurotic Organization: Diagnosing and Changing Counterproductive Styles of Management,* San Francisco, CA: Jossey-Bass, Inc., 1984. Used with permission.

ORGANIZATIONAL ROLES

The *Random House College Dictionary* (revised edition) lists as its first definition of *role* "A part or character to be played by an actor." Its second definition is "The proper or customary function of a person or thing." When combined, these definitions sum up the theory of Daniel Katz and Robert L. Kahn (1978), who state that organizations are open systems of roles.

Consistent with the dictionary's first definition, Katz and Kahn state that people are capable of "putting on" and "taking off" roles as skillfully as the most experienced actor. We play many roles in the course of a single day: mother, father, sister, brother, wife, husband, subordinate, boss, customer, amateur golfer, etc. No one role defines a person's identity; however, *we define who we are in terms of the roles we play.*

Just as people play a variety of roles, organizations also are systems of roles. Katz and Kahn emphasize that organizations are *contrived* systems—they do not exist naturally but are created by people to serve various purposes—and that an organization is a "...structure consisting of acts or events rather than unchanging physical components" (p. 187). In other words, an organization is not fixed and immutable, but must have the ability to flex and change within itself while still adhering to its declared purpose and mission.

Organizations are made up of many people playing certain prescribed roles. Each role has its own relationship to every other role and to the organization as a whole. Katz and Kahn term this phenomenon *office*, which they define as "...a particular point in organizational space; space in turn is defined in terms of a structure of interrelated offices and the pattern of activities associated with them" (1978, p. 188). Each office (or job) has a set of prescribed duties and tasks; the person who fills that office assumes that role. Offices relate to surrounding offices in certain ways; the organizational hierarchy dictates how all the offices will interact and work together to achieve the organization's common goal.

Katz and Kahn also discuss *role behavior,* which is the predictable way that a person acts when he or she is fulfilling a certain role. The fact that role behavior is predictable enables people to know what to expect *(role expectations)* and how to treat one another. We usually do not treat a fast-food clerk, for example, in the same manner as we treat a company president. Nor do we expect one to act the same as the other. In order to study role behavior, then, it is necessary to examine the context in which the role is enacted and to identify the actions and behaviors that are repeated consistently within that role.

The metaphor of the individual as actor can help to explain another dimension of role behavior. When an actor plays a role, he or she portrays someone else. The actor interprets the script, decides what kind of person he or she is portraying, and does his or her best to convey that interpretation to the audience. The people in the audience watch the actor and receive messages about the type of person the character is. Thus, the audience must interpret the actor's interpretation. It sometimes happens that the

messages the actor thinks are being sent are not the messages the audience is receiving. There can be a discrepancy between the signals sent and the signals received.

In terms of organizational roles, it is clear that confusion of signals can and does occur within organizations. Employees receive messages from superiors, subordinates, and peers about what their roles are and how they should behave. Katz and Kahn call this process *role sending.* The messages that are sent are not necessarily in the form of one-on-one communication; they can be as impersonal as a corporate decision about its marketing strategy. Role sending does not always occur strictly to communicate information; people's actions also are attempts to influence others to conform to the expectations of the senders.

A person who is receiving messages about how to act in a role interprets those messages. This process is known as *role receiving.* An individual's perceptions about the sent role will affect his or her behavior in and attitude toward the role. If messages about the sent role are unclear, it is likely that the sent role and the received role will differ. In addition, a person who receives messages about how to behave in his or her role may choose to ignore or alter those messages.

The four factors in organizational roles (role expectations, sent role, received role, and role behavior) make up the *role episode.* People have expectations about how someone in a certain position should behave, and they send messages accordingly; the person playing the role receives those messages, interprets them, and behaves according to how he or she perceives the sent messages. Following is an illustration of the organizational role episode and the individual factors that contribute to role establishment.

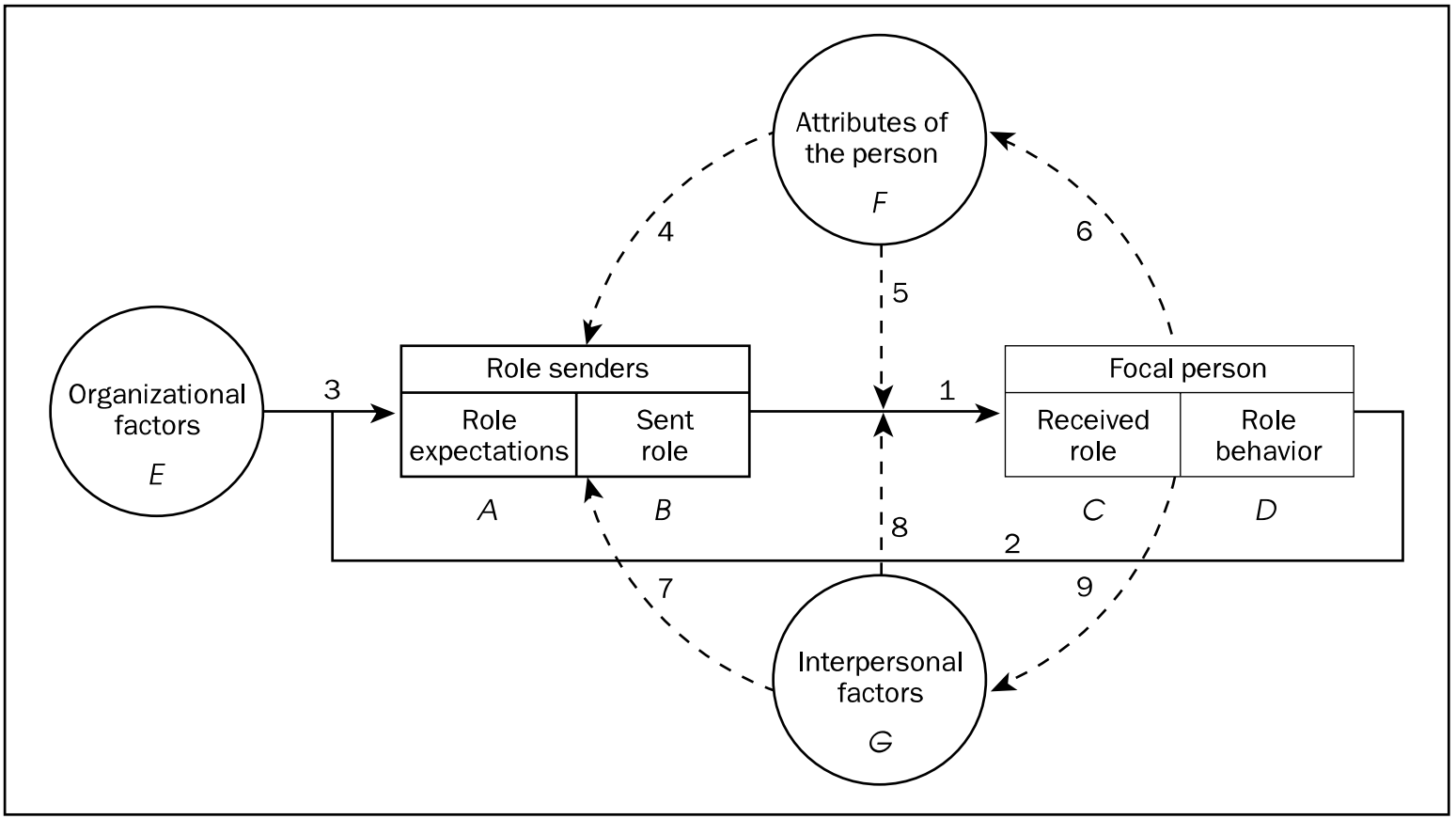
PROBLEMS WITH ORGANIZATIONAL ROLES

Role conflict can occur when two or more conflicting role expectations are present and the behavioral patterns they dictate are in conflict. A role sender may send mixed signals; the role sender and the focal person (the person who is receiving the messages) may disagree on the focal person's role; or the focal person may hold conflicting roles. Conflicts between the expectations of family and boss are a commonly occurring example of the latter situation. Katz and Kahn mention several studies that indicate that role conflict on the job is common.

Role ambiguity is another common problem that occurs in organizations. A person simply may be unsure of what he or she is supposed to do on the job. Role ambiguity also can occur when a person is unsure about the identity of the role senders, the purpose of fulfilling others' role expectations, or how his or her role behavior will be evaluated. Both role conflict and role ambiguity have been linked with low job satisfaction, high levels of stress, and decreased performance. Given the high rates at which these problems occur, the importance of achieving role clarity and individual role satisfaction becomes very clear.

REFERENCE

Katz, D., & Kahn, R.L. (1978). *The social psychology of organizations* (2nd ed.). New York: John Wiley.



A Theoretic Model of Factors Involved in the Taking of Organizational Roles

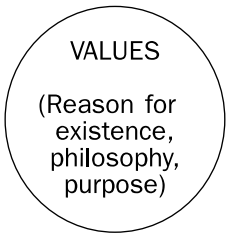
Reprinted from D. Katz & R.L. Kahn, *The Social Psychology of Organizations* (2nd ed.). New York: John Wiley.

THE ORGANIZATIONAL UNIVERSE

The organizational-universe model, developed by John E. Jones (1981), depicts organizations as complex systems that consist of people, informal and/or formal groups, divisions, and so on. Organizations function within settings that often contain conflicting pressures. The organizational-universe model provides a basis for identifying the systems that constitute the organization before attempting to implement organizational change.

VALUES

At the core of any organization is a set of values—an underlying philosophy that defines the reasons for the organization's existence. As long as there is consensus on values among those who have power and influence within the organization, priorities generally are obvious and work is likely to be cooperative and coordinated. Commitment to a common set of values usually motivates people to work together in flexible ways.



Unfortunately, the values under which an organization operates frequently become lost in the shuffle of everyday work. For example, nonprofit organizations may find that obtaining funding has attained a higher priority than providing services.

Organizational values affect the organization's purpose and management's philosophy. When these values are not held unanimously, the resulting tension can hinder organizational effectiveness. Managers may engage in "empire building" in order to further their careers at the expense of the entire system. Managers may need to consider specific organizational values in addition to the traditional ones of making a profit or of providing quality services. These internal organizational values include:

- Cooperation
- Strategic openness
- Achievement of objectives
- Clarity
- Acceptance of responsibility
- Thoroughness
- Functional impersonal conflict
- Acceptance of interdependence
- Respect and dignity in the treatment of people
- Commitment to studying the functioning of human systems

Systematic problem solving	Expressions of feelings as well as points of view
Confrontation	Autonomy for individuals and groups
Providing and soliciting feedback	Proaction, rather than reaction
Concreteness	Experimentation
Authenticity	

Factors that affect organizational values often are covert and difficult to manage. Influential insiders and the prevailing reward system can shape the organization's value system. The stability of the work force and the focus of recruitment also can influence values. Crises, successes, and failures can lead to value shifts, as can the hierarchy, routine, and standardization. The permeability of the organization—its susceptibility to outside intrusion—can be a determinant of the stability of its core values. The resulting value changes generally lead to institutionalization, rigidity, looseness, pluralism, or chaos. Managers need to be aware of the value system underlying the operation of the organization to ensure that at least a moderate amount of consensus exists regarding the basic mission of the organization.

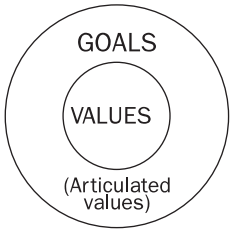
To maintain organizational values, a manager must monitor the extent to which people have common assumptions, philosophies, and purposes; more importantly, the manager must exhibit value-oriented behavior. The following are steps that managers can take to focus employees' attention on values.

1. ***Keep organizational values explicit whenever possible.***
2. ***Share one's values with one's subordinates.***
3. ***Support and model commitment to organizational values.***
4. ***Assess the fit between organizational values and subordinates' values.***
5. ***Put value considerations on the agenda for meetings.***
6. ***Question values as well as facts and procedures when problem solving.***
7. ***Look for value differences ("shoulds" and "oughts") in conflict situations.***
8. ***Avoid win-lose arguments about values.***
9. ***Update the organization's mission statement.***
10. ***Set goals that are consistent with organizational values.***

GOALS

Organizational goals often are articulated values. For example, the goal statement "to increase our market share by 6 percent in the next twelve months" implies that the organization values growth. The goal "to develop and publicize a family-counseling service by October l" may imply a value in expansion.

The most common organizational failings may be in the areas of goals, roles, and communication. The last two are affected adversely by lack of commitment to common



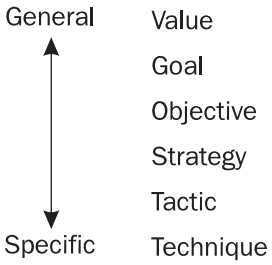
goals. Lack of clarity with regard to goals can lead to disorganization, inefficiency, and ineffectiveness.

The goal-setting process needs to be made explicit whenever possible, and managers need to encourage employees to participate in goal setting. Meaningful participation leads to a sense of involvement and influence that generates psychological ownership, which in turn leads to commitment. There is no shortcut to commitment; it evolves within people when they perceive themselves as influential.

Objectives are goals that have been made more specific. For example, a goal of improving the order-processing system may generate several objectives such as, "In the next quarter, reduce the data-processing time on an average order by thirty seconds." When objectives are highly specific, they can be monitored more easily, but the people who implement them may lose sight of the overall goal and values beneath it.

Management by objectives (MBO) programs fail more often than they succeed, usually for a combination of reasons: (a) they are imposed; (b) they inadvertently encourage individual objectives at the expense of group and system aims; (c) the initial enthusiasm for the program is not maintained; (d) the goal-setting process does not extend to lower-level employees; (e) people work on the more visible objectives; and (f) the programs are poorly implemented. As McConkie (1979) concludes from an extensive review of MBO, "It is the practice, not the theory, of MBO that is frequently faulty....The most serious faults in MBO applications center around inadequate training for those implementing MBO and the lack of follow-up" (p. 472).

When managing change, it is important to relate desired outcomes both to organizational values and to the means available for attaining objectives. It may be useful to think about organizational change as having implications that range along a continuum from general to specific:



Managers must foster consciousness of the interrelationships between these aspects of change if those who implement changes are to have a proper perspective.

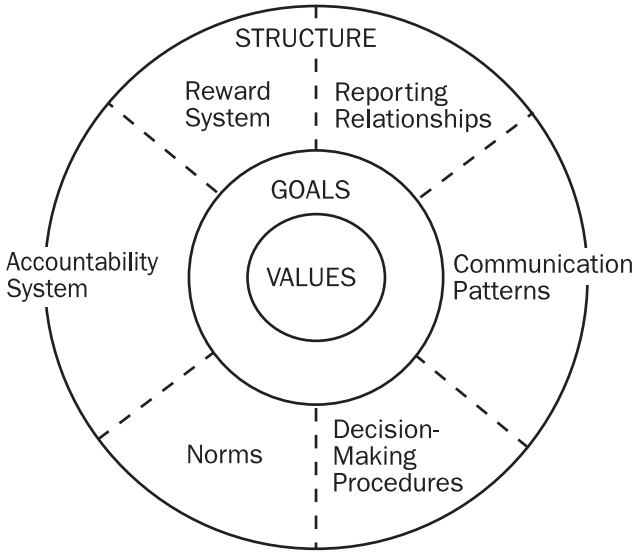
The major managerial responsibilities of this approach are as follows:

1. ***Provide training in goal and objective setting for all personnel.***
2. ***Model the process.*** (One school superintendent initiated an MBO process for school principals by making a large poster of her objectives and displaying it in her reception area. People began to see its value and asked for assistance in setting objectives for themselves.)
3. ***Create mechanisms by which all employees participate in goal setting.***
4. ***Advocate organizational values during goal setting.***
5. ***Assess the clarity of goals in all work-oriented encounters.***
6. ***Test commitment to organizational goals.***

Because individual goals often override organizational ones, leaders need to ensure that objectives reflect both the wants of the organization and the needs of its members.

STRUCTURE

There are many structures and systems within an organization in addition to the hierarchy. When establishing an organization, one must consider not only its purpose, values, and goals but also how those goals will be implemented or made operational. One must establish a system of supervisor-subordinate relationships, methods of communication, procedures for making decisions and for solving system problems, rules or guidelines for employee conduct, ways of accounting for the outcomes of the organization's behavior, and a system of rewards. All of these systems constitute the organization's structure.



Each of the six major aspects of the organization's structure begins as a formal system, but its operation almost inevitably generates a parallel informal system. Often, the informal systems become more powerful in shaping behavior than do the formal

systems. Reporting relationships comprise a formal system of status and authority. However, there often is a discrepancy between the organizational chart and the actual dispersion of power within the system. One could create a chart that depicts the relative power and influence of people as different-sized boxes to illustrate the potency of the informal system.

Most formal communication systems within organizations create more problems than they solve. Typical systems are meetings, reports, management-information systems, memoranda, and publications. Many problems result from failures to communicate effectively. The fault usually is that the formal systems create communication patterns that are top-down, one-way, document-focused instead of meaning-focused, unclear, and subject to interpretation. Therefore, informal systems such as rumors, in-group sharing, speculation, and networks emerge. These ways of obtaining and disseminating information are coping mechanisms; they encourage the tendency to screen information to serve individual needs. Disaffected members of the organization believe rumors or gossip more readily than they believe official pronouncements.

The decision-making procedures within the organizational structure are the formal and informal ways in which problems are solved. Regulations and precedents often govern the ways in which choices are made. The formal decision-making policy dictates how people should initiate reconsideration of a policy and how their requests should be handled. Because these formal procedures often are frustrating, informal ways of influencing decisions are developed. People resort to political behavior in order to obtain decisions that are satisfactory to them, and tension develops between the formal and informal systems. For example, the existence of an "old-boy network" that systematically excludes some classes of people (notably women and minorities) from participation in decision making invites the development of a competing formal system. This often results in a lose-lose situation, and organizational problem solving suffers as a result.

Both formal and informal norms govern behavior, and often the informal ones are more powerful. Formal norms are explicit rules of conduct that govern such things as eating or smoking in offices, punctuality in reporting for work, safety, and dress codes. Informal norms (such as politeness, collusion not to confront, deference to authority, working for no pay on Saturdays) are developed within a peer-influence system. By consciously creating formal norms, managers can expect that more potent, informal expectations also will arise.

The formal accountability system usually consists of the annual performance review, methods for measuring results of the behavior of individuals and groups, and a financial accounting model. Unfortunately, informal accountability systems also appear. Managers may hold subordinates personally accountable for certain outcomes or may "get on the case" of a particular department. Formal methods of accountability usually suffer from problems of measurement (as in education) and from inadequate confrontation. Consequently, in some organizations there are many places to hide, and

people collude not to confront incompetence. Instead of demoting or firing a loyal employee who has been overpromoted, an organization may create a new position: "vice president for rare events." An organization cannot withhold evaluative feedback, positive or negative, and expect individual and group effectiveness.

The reward system is probably the most powerful determinant of individual and group behavior. Formal rewards usually include compensation, benefits (perks), and recognition programs such as "employee of the month." Informal rewards often prove to be the more motivating factors, however. Rewards such as a private office, more salaried lines on one's budget, and "strokes" during an important meeting are very influential in shaping individual and group behavior. The pay system may have less saliency for some individuals than opportunities for promotion, for recognition, or for additional responsibilities. Expectancy theory (Nadler & Lawler, 1980) states that people will behave in ways that they expect will produce valued outcomes.

The organizational structure consists of interdependent systems, each of which has both formal and informal components. This is the operating core of the organizational universe and is the proper focus of organizational change. Problems that arise in the organization can be traced to deficiencies in these six systems. Vertical intergroup problems (such as top versus middle management) often stem from difficulties in reporting relationships and in communication patterns. Horizontal intergroup conflict (such as manufacturing versus warehousing) can arise when there are ineffective accountability and reward systems. When decision-making procedures and norms are detrimental to specific classes of people, diagonal intergroup relations (such as black/white, male/female) became strained. Managers not only must monitor the effectiveness of all aspects of the structure but also must assess their joint effects. Some guidelines to this approach are:

1. ***Study the distribution of power within the organization.***
2. ***Institute process critiques in all meetings.*** (How are we doing in this meeting?)
3. ***Set up feedback loops so that information flows up the organization as well as down.***
4. ***Establish procedures for correcting the negative effects of rumors.*** (For example, in a crisis, create a rumor-control center to provide accurate information.)
5. ***Experiment with consultative and consensus methods of decision making.***
6. ***Conduct an assessment and diagnosis of organizational norms.***
7. ***Provide training for managers in conducting performance reviews.***
8. ***Confront inadequate performance in a problem-solving way.***
9. ***Develop employee participation in evaluating the pay-and-benefits system.***
10. ***Look for informal ways to reward people.***

11. ***Schedule team-building sessions for groups that are in conflict with each other before staging an intergroup confrontation.***

Managing the structure of the organization requires continual assessment of the organization, both because it is the essential core of the system and because so many of its aspects are covert.

CLIMATE

The climate of the organization is the psychological atmosphere. It is both a result of and a determinant of the behavior of people and groups. Gibb (1978) emphasizes that assessment of the organization's trust level is a starting point in the management of change.

It is important for managers to recognize that the organizational climate and the attitudes of others cannot be controlled or changed directly. Attitudes can be thought of as rationalizations for behavior; if one changes the behavior, the attitudes eventually will catch up. Problems in the organizational climate are likely to have roots in the structure. To improve the climate, one must change the ways in which work is done. For example, talking about trust does not generate trust and may produce the opposite. The primary action steps indicated by this approach are:

1. ***Monitor attitudes and morale as well as organizational functioning.***
2. ***Focus on problem identification and problem solving in:***
   - *Reporting relationships* (role expectations, reorganization);
   - *Communication patterns*, especially in meetings; try outlawing memos;
   - *Decision-making procedures* (consult with subordinates more often; experiment with consensus seeking in meetings);
   - *Norms* (rules, pressures for group conformity);
   - *Accountability system* (put some punch into the performance review; establish criteria for success);
   - *Reward system* (initiate a multilevel review of salary administration; publish criteria for promotions and transfers).
3. ***Include the disaffected as well as those who are satisfied when diagnosing causes of climate problems.***
4. ***Push for visible results.***

An unhealthy organizational climate can hinder productivity and achievement. Managers must be sensitive to the effects of their behavior on the climate and they should examine the structure to find ways to improve conditions.

ENVIRONMENT

The organization exists in an environment with which it must interact. Although the environment differs for each organization, some considerations—such as the availability of energy—are almost universal. Organizations are not closed systems; they are open—their boundaries are permeable. In the organizational-universe model (see figure titled "The Organizational Universe"), this permeability is depicted by an uneven line surrounding the climate dimension.

The organization's internal structure must be flexible enough to cope with the unexpected. If the organization becomes excessively bureaucratic, its members become oriented to internal rather than external realities. Consequently, they may lose their sensitivity to the environment, and the organization may become vulnerable. The reverse situation—in which forces in the environment are permitted to upset internal priorities—promotes disorganization. For example, a consulting firm may embrace the dictum, "The client is king." The problem is that any client could create havoc within the system at any time, and the resultant scramble could affect schedules, priorities, and other operations.

Modern organizations are becoming increasingly permeable. The intrusions, in some cases, have affected their core values. Government regulations concerning safety and equal opportunity have struck at the heart of many organizations. A system created to manufacture widgets does not necessarily function with similar effectiveness when it is asked to solve social problems. This requires the organization to shift its values, philosophy, and purpose.

The organizational boundary often is ambiguous. Just as there are degrees of being "inside," there are degrees of being "outside" as well, because most people are members of more than one organization. Family and political ties can affect the organizational structure for better or for worse. In addition, a primary environment for one organization may be a secondary one for another. The macroeconomic environment is turbulent. Some ways in which managers can prepare to deal with environmental change are:

1. ***Monitor the organization's speed of response to changes in the environment.***
2. ***Assess the costs of the organization's current degree of permeability.***
3. ***Establish clear policies regarding transactions with components of the environment.***
4. ***Set goals; do not simply react to outside pressures.***

REFERENCES

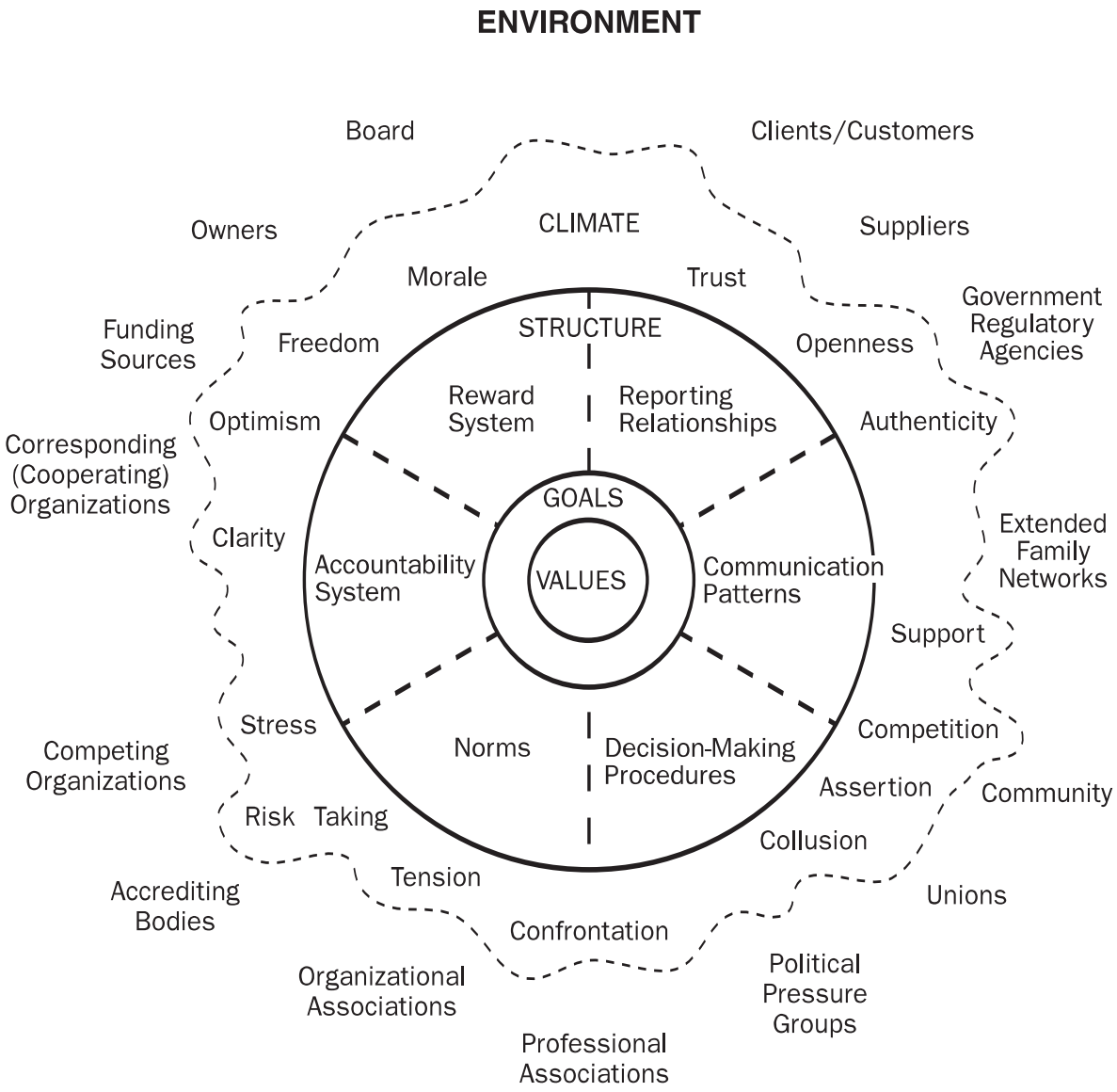
Gibb, J.R. (1978). *Trust: A new view of personal and organizational development.* Los Angeles: Guild of Tutors Press.

McConkie, M.L. (1979). Classifying and reviewing the empirical work on MBO: Some implications. *Group & Organization Studies, 4*(4), 461-475.

Nadler, D.A., & Lawler, E.E., III. (1980). Motivation: A diagnostic approach. In W.B. Eddy & W.W. Burke (Eds.), *Behavioral science and the manager's role* (2nd ed.). San Diego, CA: Pfeiffer & Company.

SOURCE

Jones, J.E. (1981). The organizational universe. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1981 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

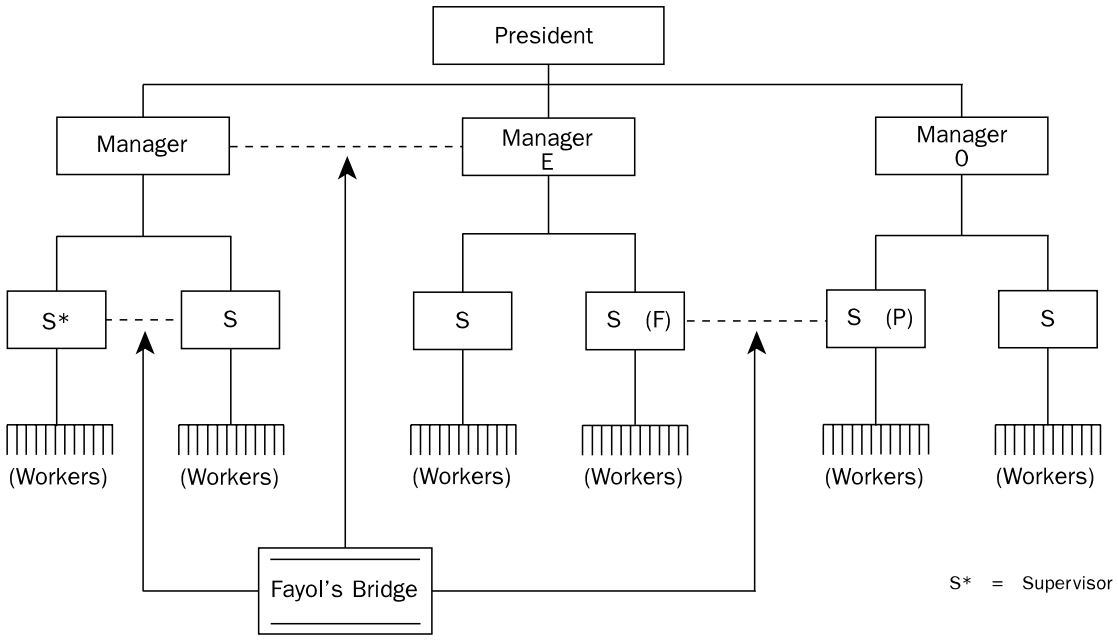


The Organizational Universe (Jones, 1981)

ORGANIZATIONALLY CENTERED STRUCTURE

Henri Fayol (1921, 1949) was concerned with the large-scale structure of the organization rather than with task design or small-scale structure. But more than this, Fayol was a pragmatist. As head of a French steel-and-coal mining operation, he developed a set of fourteen principles that he believed covered most managerial situations. It is not clear how absolute Fayol meant to be about his principles—whether he intended them to be guidelines or laws. In one essay, Fayol (1978) wrote, "I became convinced that social phenomena are, like physical phenomena, subject to natural laws independent of our will." Yet in his 1916 papers on general and industrial management, Fayol wrote, "There is nothing rigid or absolute in management affairs...seldom do we...apply the same principle twice in identical conditions....Therefore principles are flexible and capable [of] adaptation" (1949, p. 19).

In addition to creating the first set of principles of organization, Fayol added a note that was the first step toward major change in the traditional view of organizational structure. In a traditional structure, a worker at any level has only one primary interaction—with his or her supervisor. Fayol called this the "scalar" principle; in the military it commonly is referred to as "chain of command." Fayol modified this principle significantly with still another principle—that of the "gangplank," which is illustrated in the figure that follows and labeled "Fayol's Bridge."



Fayol's Modification of Traditional Organizational Structure

Fayol explained his principle as follows:

> Imagine that department F has to be put in contact with department P...it is much simpler and quicker to go directly from F to P by making use of a "gangplank" and that is what is most often done. The scalar principle will be safeguarded if managers E and O have authorized their respective subordinates F and P to deal directly. (1949, p. 35)

This may seem ridiculously simple, but it was revolutionary when Fayol wrote it at the beginning of the Twentieth Century.

Fayol was, in a pragmatic way, becoming aware of the increasing need for coordination in organizations, a need brought about by continuing technological development and one that could not be satisfied by the traditional organizational structure. However, Fayol was no radical; in fact, he strongly opposed Taylor's (1911) revision of the traditional structure as an unacceptable violation of the principle of chain of command.

EFFECTS AND IMPLICATIONS OF FAYOL'S PRINCIPLES

Fayol's principles had a strong and lasting impact on the development of management thought in Europe and in England. His effect on American management was indirect, because his book did not appear in an easily obtainable, English-language edition until 1949. Nevertheless, his work encouraged others to add more principles until, by the 1930s, some authors had developed hundreds of "principles of management."

Like his gangplank idea, Fayol's principles generally were sensible if sometimes a bit fuzzy. Unfortunately, not all later authors had Fayol's depth of managerial experience, and their principles often were meaningless lists of trivia. In fact, management theory generally was the product of scholars and academics, rather than the result of contributions from managers.

REFERENCES

Fayol, H.L. (1921). *Incapacite industrielle d'état: Les P.T.T.* Paris: Dunod.

Fayol, H. (1949). *General and industrial management* (C. Storrs, Trans.). London: Pitman.

Fayol, H.L. (1978). L'éveil d'esprit publique. In E. Dale, *Management: Theory and practice* (4th ed.). New York: McGraw-Hill.

Taylor, F.W. (1911). *Scientific management.* New York: Harper.

SOURCE

Sashkin, M. (1981). An overview of ten management and organizational theorists. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1981 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

THE ORIGINS OF ORGANIZATIONAL HIERARCHY

In ancient times, organizations were considerably more simple than those in which people live and work today. The archetype is the tribe, ruled by a religious leader-authority figure who is obeyed by all. Such a system becomes unwieldy when two conditions occur: (a) the group size increases beyond a dozen or so, and (b) the work to be done becomes more complicated than the most primitive of tasks (foraging for food, setting up shelters, and so on). In the Bible, there is a clear description of organizational change. Moses found that he could not cope with being the only leader of the Israelites; the job was too complex, and he simply did not have the time to give instructions to every person. So he named a group of leaders, each of whom was responsible for ten persons. For every ten "leaders of tens," there was a leader of tens of tens, or hundreds. Thereby, an early hierarchy was developed.

Of course, the hierarchical structure that is characteristic of most organizations is even older than the one developed by Moses, but it is important to note that hierarchies taller than Moses' were rare in the ancient world. For example, Roman armies and armies like them usually contained captains who led a few dozen to a few hundred men. The captains reported to a general, who often was the head of the army. Sometimes a very large—or very sophisticated—force might include subcaptains (lieutenants) or "junior" generals who reported to the chief general, but even then the hierarchy would be relatively flat, a characteristic of most organizations throughout history. During the past few centuries, and even in the last century, a typical small factory was organized like a feudal estate. The figure on page 135 depicts this traditional organizational structure.

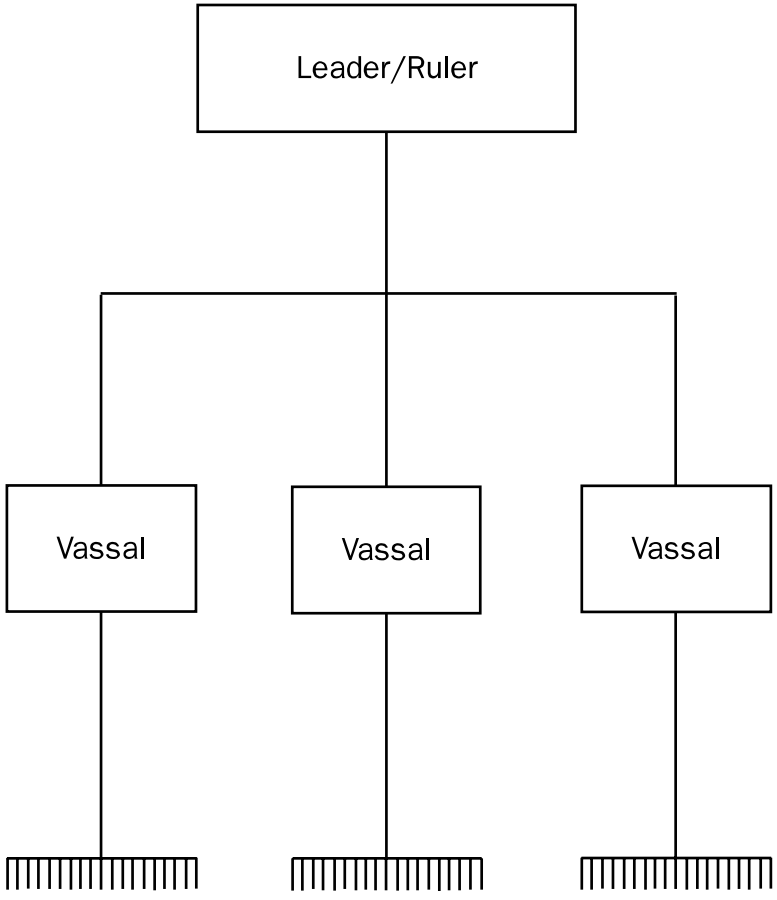
TRADITIONAL HIERARCHY IN A CHANGING WORLD

As society evolved, technological progress was made, and organizations became more complex, the traditional form of organizational hierarchy began to malfunction because of problems that it was not designed to handle. It could not accommodate the complex interdependencies with which organizations were confronted as technology advanced. Well before 1900, it was clear that most organizations could not operate effectively within this framework. At the beginning of the Twentieth Century, people began to modify the traditional structure in an effort to aid organizational functioning. Organizations became more complex, and more layers were added to the hierarchy to manage this complexity. Vice presidents, top managers, middle managers, department heads, and different types of supervisors all were thought necessary to envision, coordinate, and oversee the work of the "workers." It is ironic that at the end of the same

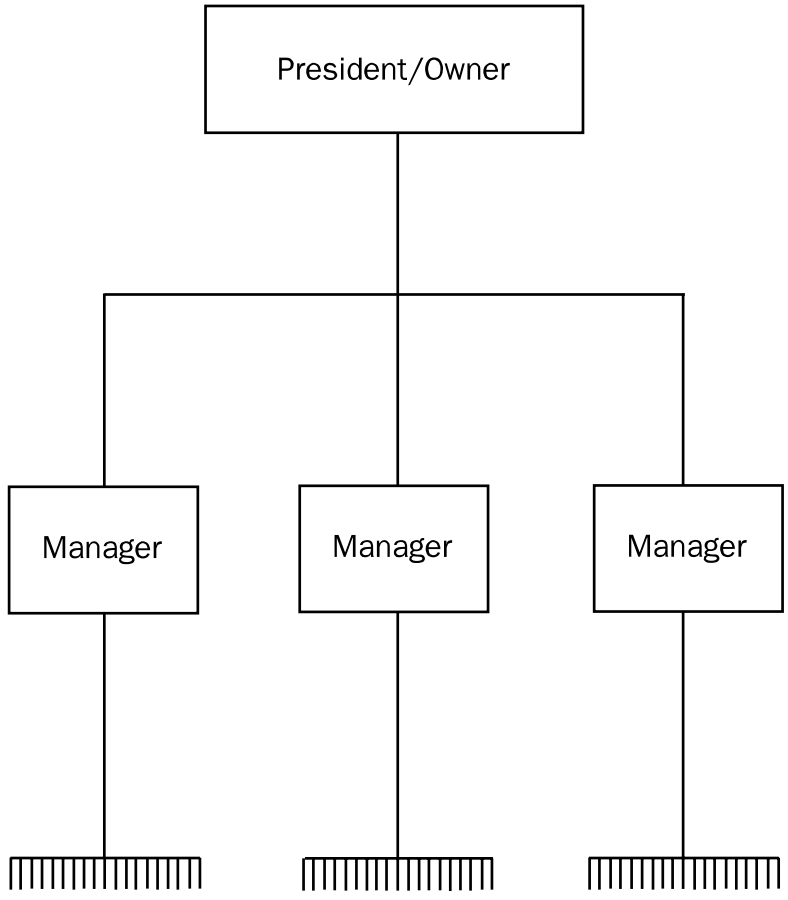
century, organizational theorists once again espouse flatter, less complex organizational structures.

SOURCE

Sashkin, M. (1981). An overview of ten management and organizational theorists. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1981 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.



TRADITIONAL FEUDAL STRUCTURE
(circa 1500 A.D.)



TRADITIONAL ORGANIZATION STRUCTURE
(circa 1875 A.D.)

Traditional Structure

PARTICIPATIVE DIAGNOSIS, DESIGN, AND IMPLEMENTATION

Any substantive model of organizational behavior assists the manager or consultant by suggesting which elements should be analyzed and by aiding in identifying both the causes of problems and possible solutions. However, most models do not indicate how to accomplish diagnosis and problem solving. According to David A. Nadler (1983), what is needed is a process model (or a set of sequenced phases of activity) that serves as a guide for using a substantive model. Nadler presents a process designed for use by a consultant when implementing a participative approach to addressing organizational problems—an approach in which employees are involved in diagnosing problems, developing solutions, and implementing those solutions.

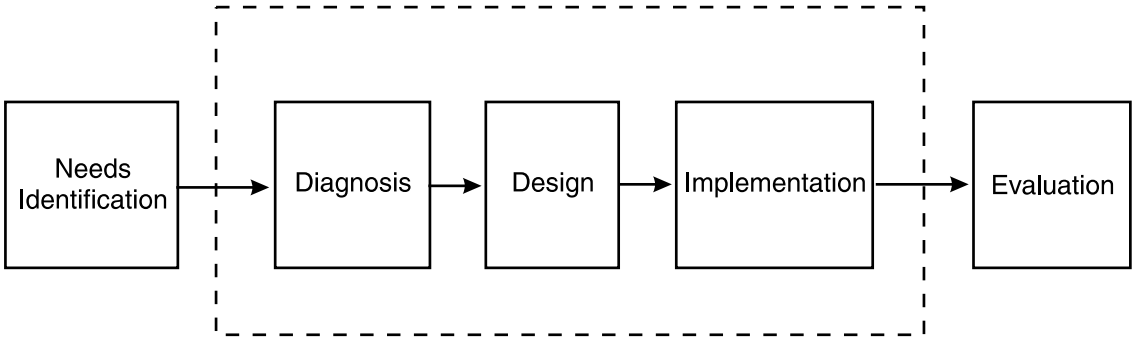
Process Overview

As shown in the figure on the next page, the process consists of five phases. In the first phase, *needs identification,* the consultant collects limited data for the purpose of developing diagnostic hypotheses and determining whether the problems and their causes are organizational in nature. In the second phase, *diagnosis,* the consultant and a team of people from the organization participate in an in-depth, data-collection-and-analysis activity aimed at identifying problems, their costs, and their causes. The third phase is *design,* during which the consultant and another team of organizational members develop and design solutions for the problems identified in the diagnostic phase. In the fourth phase, *implementation,* a transition team consisting of organizational members coordinates the movement of the organization from its current state toward the full implementation of the design-phase recommendations. Finally, in the *evaluation* phase, the diagnostic activities are repeated to determine whether the projected benefits of the design were realized.

Throughout the process, the bulk of the work and analysis is done by teams of employees (including managers) who are aided by the consultant. While these activities are being completed, the senior management of the client unit also is involved in a series of workshop activities that parallel the employee-team phases. In each case, the client participants use specific tools to accomplish data collection, analysis, design, and implementation, and most of these tools are provided within the context of Nadler and Tushman's (1979, 1981) congruence model of organizational behavior.

The Structure and Activities of Each Phase

The total process is designed to be applicable in a number of settings with limited input and support from an "expert" or consultant. In each phase, specific individuals or groups are designated to complete specific activities.



An Overview of the Organizational Diagnosis, Design, and Implementation Process

1. ***Needs Identification.*** In this phase, the consultant and the chief operating officer of the particular client unit, department, or group work together to identify major problems, to determine whether the subsequent phases of diagnosis and design are needed, and to ensure that these activities will be responsive to the identified problems and needs. Typically, this phase starts when the client, usually a senior manager, approaches the consultant. During an ensuing discussion, the client talks about his or her perception of problems and needs in the organizational unit, and the consultant describes the analysis, design, and implementation process. This discussion may be repeated in a separate session for other senior managers in the unit.

These initial discussions usually are followed by a limited data-collection activity. The consultant conducts interviews with employees in the unit who represent different levels and different functional groupings. The interview is structured but open ended, with questions derived from Nadler and Tushman's congruence model. These data, as well as observational data and pertinent information from sources such as performance results and annual reports, are analyzed using the congruence model. Subsequently, a series of diagnostic hypotheses is developed; these hypotheses are recorded as testable-but-tentative statements of problems and their causes. The entire analysis is then presented to the senior management of the unit along with a proposal (if appropriate) outlining the scope and nature of a recommended diagnostic effort. Management then makes a decision whether to stop the process at this point or to proceed to diagnosis.

2. ***Diagnosis.*** The goals of the diagnostic phase are to identify problems (discrepancies between expected and actual outputs), to estimate the costs associated with those problems, to identify factors causing the problems, and to identify opportunities or arenas for action aimed toward solutions. Again, Nadler and Tushman's congruence model serves as the basic diagnostic device, although other, more specific models are employed as well. Among the models frequently used are those of *performance* (Lawler, 1973), *organizational design* (Galbraith, 1973, 1977), *job design* (Hackman & Oldham, 1980), and *organizational climate* (Litwin & Stringer, 1968).

Phase	Designated Individual or Group	Activities
Needs Identification	Consultant	Initial discussion with management Employee interviews Analysis and hypothesis formation Feedback of analysis Diagnosis proposal Decision about proceeding
Diagnosis	Consultant Diagnostic team composed of organizational members; assigned full-time	Data collection: work flows, interviews, instruments, observations, archival sources
Design	Consultant Design-team leader Design team composed of organizational members; assigned full-time	Design or redesign of work flows, the organization (grouping of functions), jobs, and/or support systems and mechanisms
Implementation	Consultant Transition manager Transition team composed of organizational members; assigned part-time	Analysis of transition issues Development of transition plan (activity network, benchmarks, evaluation points) Development of “marketing” strategy Execution and monitoring of transition plan
Evaluation	Consultant Evaluation team composed of organizational members	Repetition of diagnostic phases Review of findings compared with design-report predictions

Major Phases of the Organizational Analysis, Design, and Implementation Process

During this phase, a team is formed and assigned to work full-time on diagnosis. Its members come from the organization and are chosen on the basis of their specific subject-matter expertise (as related to the work and technology of different parts of the unit), their roles in the informal organization (opinion leaders), their credibility, and their verbal and written communication skills. Usually, eight to twelve people are selected from different levels of the organization.

The consultant trains the team in the conceptual models and the specific diagnostic tools to be used. The team then collects information that includes descriptions of work flows as well as data derived from individual and group interviews, instruments, observations, and archival sources. These data are analyzed to identify problems and to estimate costs (usually in dollar terms, accounting for additional expense, lost revenue, and so forth). The team then writes a diagnostic report that details the methodology and identifies problems, causes, and penalties (costs).

The diagnostic activities are designed to take no more than twenty to twenty-five working days. The team formally presents its report to the management of the unit, whose members then decide whether to proceed to the design phase.

3. ***Design.*** The design phase also depends on a team of organizational members who are assigned to work on their task full-time and who are chosen according to approximately the same criteria that governed the selection of the diagnostic team. However, there are a few differences in team composition, partially because of the scope of the design activities and the segments of the organization that will be the focus of the design. Also, the average hierarchical level of employee is generally higher for the design team because a somewhat broader perspective frequently is needed for the design of solutions than for the diagnosis of problems. In addition, this team requires a designated leader to manage its work; usually, the individual chosen is someone who reports directly to the chief operating officer of the unit. Thus, in this phase the consultant functions more as a teacher and facilitator than as a manager.

The basic goal of the design team is to design or develop solutions to the problems identified in the diagnostic phase. The main conceptual tool used in addition to the congruence model is a specific theory of organizational design based on information-processing concepts (Galbraith, 1977; Tushman & Nadler, 1978) of job design (Hackman & Oldham, 1980). However, the solutions that are developed may not be restricted to job design; depending on the nature of the problems identified in the diagnostic phase, solutions also may encompass training, team building, changes in management practices, and so forth. When these types of solutions are called for, still other conceptual tools are required.

The design team delves into and may provide alternative approaches to the actual work flow, the organization itself (including the grouping of functions and the relationships among various functions), specific jobs, and support systems and mechanisms (rewards, measurements, methods and procedures, supervisory relationships, and so forth). Recommendations are summarized in a report that is presented formally to management. Then management must decide whether to accept

the design as it is or to alter it and whether to continue through the implementation phase.

The training of the design team is accomplished in a somewhat different way from the training of the diagnostic team. Members are not trained completely at the beginning of the process; instead, they are trained in modules corresponding to the different types of design tasks to be completed (for example, work-flow redesign or functional regrouping). Each module is conducted immediately before the team is required to do that particular work.

As is the case with the diagnostic phase, the design phase, including training, is structured to be completed within twenty to twenty-five working days.

4. ***Implementation.*** Experience has indicated the vital role of a specific implementation program in bringing about organizational improvements (Nadler, 1981). However, this phase frequently is given insufficient attention. The process described here places a good deal of emphasis on managing the implementation of the design recommendations.

A transition team is assembled to manage the implementation. This team has an officially designated leader, usually someone who reports directly to the chief operating officer of the unit. The consultant trains the members by conducting an "implementation-strategies workshop" and then guides the team through a process of identifying the issues (both technical and political) involved in the implementation. Subsequently, the team members collectively develop a transition plan that includes an activity network, such as a Program Evaluation and Review Technique (PERT) chart (Miller, 1974); benchmarks; evaluation points; and so forth. In addition, a strategy for "marketing" the implementation is developed.

When the transition plan is approved by management, the team is responsible for monitoring the implementation process until the new structure has been instituted completely. The period of time required varies from a few weeks to a number of months, depending on the scope, size, and intensity of the changes being implemented.

5. ***Evaluation.*** During this final phase, the diagnostic activities are repeated to determine whether the problems originally identified were solved, whether the design was implemented and produced the results predicted, and whether any new problems arose or were created as a result of the new design. These determinations may lead to a repetition of the cycle with a different scope or with new problems to be addressed.

The Management Workshop "Parallel Path"

Early experiences with the five-phase model indicated that it was relatively successful through the end of the design phase. Clients tended to agree to conduct diagnosis, accept the diagnostic report, authorize the establishment of a design, and accept the design recommendations. Frequently, however, severe problems were encountered during implementation because the senior management of the unit did not fully understand, support, or feel involved in the new structure and the implementation process. This

situation led to the development of another set of activities aimed at helping senior management to understand, influence, and thus "own" the design, all with the goal of increased success in the implementation phase. What was developed was a series of workshop sessions involving the chief operating officer of the unit and his or her two immediately subordinate levels. These workshops run concurrently with the diagnostic, design, and implementation phases and are referred to as the "parallel-path" activities. The general goals of the parallel path are as follows.

- To introduce the managers to the concepts, models, and tools that the diagnostic, design, and implementation teams are using.
- To provide an opportunity for the managers to look at their own operations and to develop their own informed views about problems, solutions and implementation processes.
- To transform the managers into informed, critical consumers of diagnostic and design reports.
- To enable the managers to provide active support during the implementation of new designs and solutions.

There are three workshops, each associated with a particular phase of the employee-led process:

1. ***Diagnosis Workshop.*** This workshop is a series of sessions conducted on four separate half-days. The participants are introduced to the concept of models for diagnosis and design and are taught the general diagnostic model (Nadler & Tushman, 1977) as well as some of the basic concepts of motivation, job design, and organizational design. They gain experience with the concepts through analysis of case studies and case discussions and, finally, they apply these concepts to the unit of which they are all part. In a fifth session, the parallel-path group meets with the diagnostic team to hear and react to its report.
2. ***Design Workshop.*** The next workshop is aimed at familiarizing the managers with tools for design and at allowing them to make some basic, fundamental design decisions about the configurations of the organization as a macrocosm. The managers are taught both the concepts and the techniques of the information-processing model of design (Galbraith, 1973, 1977; Tushman & Nadler, 1978) and then they apply that model to case studies and their own organization. The final session usually transpires immediately before the design team presents its report, although throughout the process there is contact between the two groups (via the consultant and through overlapping membership) so that all activities coincide.
3. ***Implementation Workshop.*** The implementation workshop actually precedes the activities of the implementation team. The goal of this workshop is to develop the managers' sensitivity to the critical importance of effectively managing the transition between a current state and the desired future state. The managers

work on a complex case study in which an appropriate new design was implemented but the transition was managed poorly, leading to major problems. Then the members are presented with concepts of transition management and the implementation of change (Beckhard & Harris, 1977; Nadler, 1981), after which they establish a set of issues and recommendations for the transition team to consider.

At the conclusion of the workshops, the management group continues to function during the period of implementation and transition. It meets at fairly regular intervals (for example, once a month) to hear reports from the transition team and to monitor progress.

Thus, the mainstream activities (from needs identification through evaluation) and the parallel-path workshops form an integrated process that not only allows for employee participation in the diagnosis, design, and implementation activities but also maintains the involvement of and builds the support of senior management. In the mainstream phases, the employee teams complete the work of the transition; meanwhile, the senior managers are trained to understand and appreciate the work so that they can support the end products.

CHARACTERISTICS OF THE PROCESS

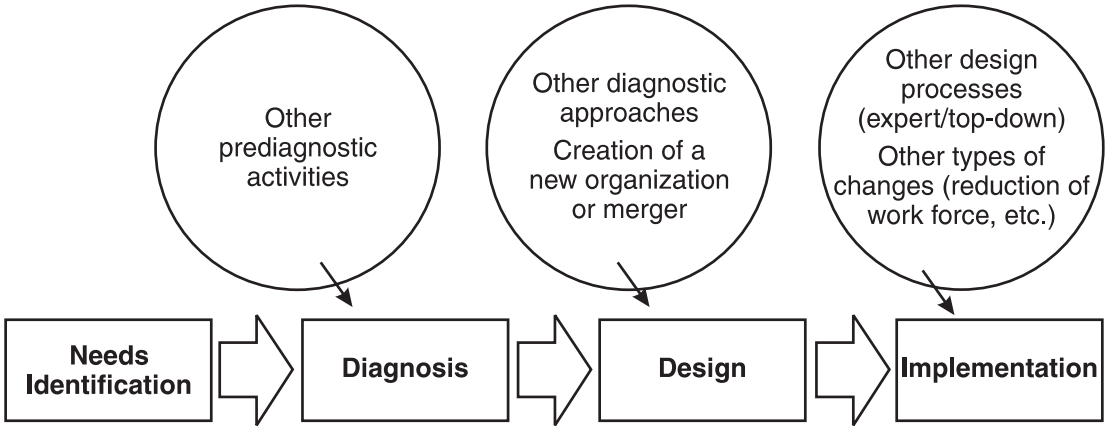
The entire process provides one way of incorporating and making tradeoffs among the desirable characteristics of an effort to improve organizational effectiveness.

- The approach is ***diagnostic;*** it provides for two phases of diagnosis to ensure that the particular methods, tools, and processes selected are appropriate for the organization.
- It also is ***systematic;*** it is comprehensive and can be outlined ahead of time and managed.
- The process is built on the use of ***research-based models*** for diagnosis, design, and implementation. It enables the use of scientific tools in an applied setting.
- The team structure provides a method for ***employee participation*** in the actual work of diagnosis, design, and implementation.
- The structure of the process and the use of intensively managed teams and task forces allows for ***timeliness*** in completion.
- Finally, through the parallel-path activities, ***senior-management involvement*** is ensured.

OTHER APPLICATIONS

Nadler's technology can be used in ways other than as a five-stage process. Specifically, the process can begin at any of a number of points, as illustrated by the figure below.

The diagnosis, for example, could be initiated with the design phase. This approach might be possible in situations in which other diagnostic approaches have been used and would be particularly applicable when a new organization is being formed or when existing ones are merging. Some abbreviated diagnostic work could be done to determine the key strategic and work-flow issues, and the design phase could be the first full-scale activity.



Alternative Applications of the Process

The implementation phase can be used by itself. For example, other processes might be used to develop the design (such as a "top-down" design, a senior-management design, or an outside "expert" design); then the implementation phase would be used as a way of implementing the design in a participative fashion. Similarly, the implementation process could be used to implement other types of major organizational changes (such as the reduction of the work force, implementation of new technology, changes in physical location, and so forth).

REFERENCES

Beckhard, R., & Harris, R. (1977). *Organizational transitions.* Reading, MA: Addison-Wesley.

Galbraith, J.R. (1973). *Designing complex organizations.* Reading, MA: Addison-Wesley.

Galbraith, J.R. (1977). *Organization design.* Reading, MA: Addison-Wesley.

Hackman, J.R., & Oldham, G.A. (1980). *Work redesign.* Reading, MA: Addison-Wesley.

Lawler, E.E. (1973). *Motivation in work organizations.* Belmont, CA: Wadsworth.

Litwin, G.H., & Stringer, R.A. (1968). *Motivation and organizational climate.* Boston: Harvard University Graduate School of Business Administration.

Miller, L.R. (1974). *A peek at PERT: A brief introduction to program evaluation and review technique.* Escondido, CA: Center for Leadership Studies.

Nadler, D.A. (1981). An integration theory of organizational change. *Journal of Applied Behavioral Science, 17*(2), 191-211.

Nadler, D.A., & Tushman, M.L. (1977). A diagnostic model for organizational behavior. In J.R. Hackman, E.E. Lawler, & L.W. Porter (Eds.), *Perspectives on behavior in organizations.* New York: McGraw-Hill.

Nadler, D.A., & Tushman, M.L. (1979). A congruence model for diagnosing organizational behavior. In D. Kolb, I. Rubin, & J. McIntyre (Eds.), *Organizational psychology: A book of readings* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Nadler, D.A., & Tushman, M.L. (1981). A congruence model for diagnosing organizational behavior. In D.A. Nadler, M.L. Tushman, & N.G. Hatvany (Eds.), *Approaches to managing organizational behavior: Models, readings, and cases.* Boston: Little, Brown.

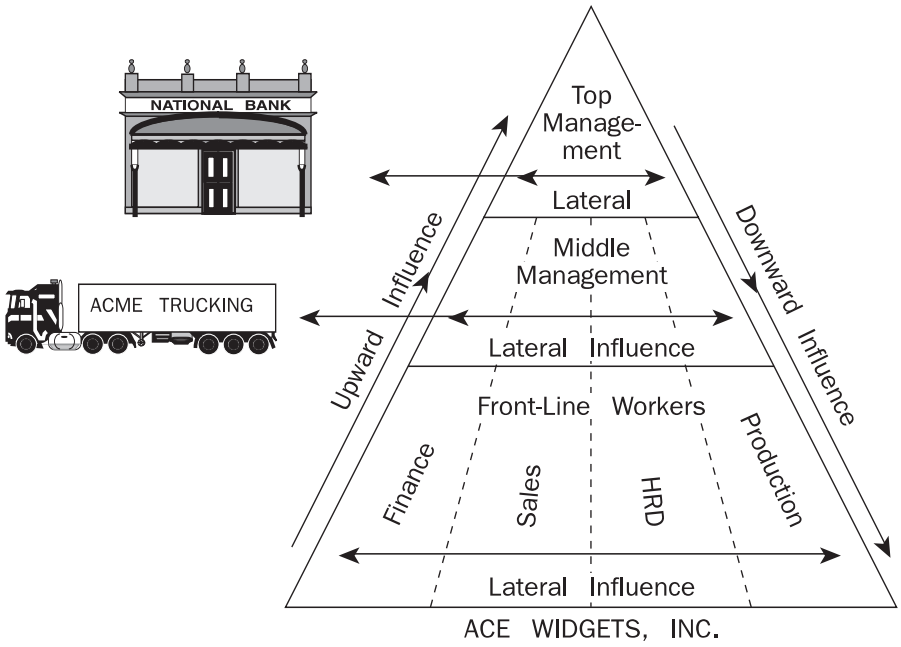
Tushman, M.L., & Nadler, D.A. (1978). Information processing as an integrating concept in organizational design. *Academy of Management Review, 3,* 613-624.

SOURCE

Nadler, D.A. (1983). Organizational analysis, design, and implementation: An approach for improving effectiveness. In L.D. Goodstein & J.W. Pfeiffer (Eds.), *The 1983 annual for facilitators, trainers, and consultants.* San Diego, CA: Pfeiffer & Company.

THE PLURALISTIC/POLITICAL MODEL

Power and politics are part of organizational life. Both involve self-interest, getting what one wants from others, and overcoming resistance (influencing) (French & Bell, 1984). Power usually is conceptualized in terms of its source, such as *reward, coercive, referent, legitimate,* and *expert* (French & Raven, 1959). Greiner and Schein (1988) define power as "the capacity to influence another person or group to accept one's own ideas and plans" (p. 13). Influencing others implies *directionality.* Greiner and Schein assert that, within organizations, there are three primary directions in which power is expressed: downward, upward, and laterally. *Downward* refers to the influence of superiors over subordinates; *upward* refers to the influence of subordinates over superiors; and *laterally* (also known as interdepartmental, sideways, and horizontal) refers to the influence of those who are neither superiors nor subordinates. The figure below depicts the three directions of influence.



Three Directions of Influence

ORGANIZATIONAL MODELS

The way in which power is perceived often depends on one's own beliefs about the natures of people and organizations. Greiner and Schein (1988) present three models of organizations; each represents a common view of the function of power in organizations.

Each model treats power distinctively; therefore, each regards a different type of power as the most important and useful.

The Rational/Bureaucratic Model

The rational/bureaucratic model focuses on a *rationally structured system* designed around specialized divisions of labor and formalized processes. Hierarchical authority and top-down communication are considered the most efficient means by which to predict, control, and stabilize the environment. Power is vested only in top management; any changes in the power structure are designed to improve managers' control over subordinates. Management styles can be humanistic, but power is held only by those at higher levels in the hierarchy. Upward expressions of power are viewed with suspicion and perceived as disruptive, yet sometimes are permitted if they are tightly controlled. Lateral power is nonexistent, as power is fixed in the hierarchy.

The Collegial/Consensus Model

The collegial/consensus model focuses on interpersonal relationships and small groups. Specialized divisions of labor and formalized procedures are minimized in order to facilitate subordinates' interaction and participation in decision-making processes. Formal authority is downplayed. The need for tight control is replaced by teamwork and an organizationally sanctioned "esprit de corps." Power, when perceived from the collegial/consensus viewpoint, is vested in subordinates, and the redistribution and equalization of power is the norm. Downward power is endured only in situations in which peer pressure has proven ineffective. Lateral power and political behavior are unnecessary because of the high degree of consensus and collaboration within the organization.

The Pluralistic/Political Model

The pluralistic/political model focuses on different interest groups within the organization. Each group is perceived as *well-intentioned* in its efforts to accomplish work-related objectives. Conflict is normal and emerges naturally as groups compete for organizational resources. Political behavior also emerges naturally as people attempt to exert upward, downward, and lateral influence in order to secure needed resources. From the pluralistic/political perspective, political behavior develops when attempts to influence others are rejected.

Greiner and Schein regard political behavior and the expression of power as realities of organizational life that are necessary for the accomplishment of work objectives. Downward power assures that the needs of the entire organization are considered in lower-level decision making. Upward power is important when people at lower levels need to obtain resources in order to complete tasks. Lateral power helps people to obtain resources from those over which they have no formal authority, such as peers, vendors, technical experts, and the like.

Greiner and Schein believe that the first two models may be effective in certain situations. The rational/bureaucratic model is effective in systems that operate in stable environments, and the collegial/consensus model is effective in highly complex and dynamic environments. However, both have negative consequences; the rational/bureaucratic model produces highly structured and formalized systems that inhibit initiative and innovation, and the collegial/consensus model encourages undisciplined behavior at lower levels, which ultimately impedes team development and organizational effectiveness. Usually, the pluralistic/political model most accurately reflects the reality of organizational functioning. It assumes that political behavior and the expression of power are essential for reaching equitable tradeoffs between specialized interests and broad organizational goals.

In summary, one's perception of an organization tends to influence how one views power in an organizational setting. Of the three models described previously, the pluralistic/political is considered to most accurately reflect organizational reality in that it assumes that all expressions of power—downward, upward, and lateral—are necessary parts of getting work done. Special emphasis is placed on the importance of lateral influence when dealing with people over whom one has no formal authority or, as Greiner and Schein (1988) put it, "managing those you do not manage" (p. 20).

BASES OF POWER

In the pluralistic/political model, the *direction* in which power is expressed is the basis of political behavior. The *power base,* for Greiner and Schein, is the *source* of power and is composed of resources over which the individual has control. Greiner and Schein believe that the nature of a person's power bases determines which power strategies are available to that person in any given situation and, therefore, determines that person's capacity to influence others.

Position Power

Position power is the most familiar and most recognizable source of power. It is similar to French and Raven's (1959) concept of *legitimate power* and is the authority bestowed on a position in the organizational hierarchy. Position power provides the formal authority and "psychological legitimacy" to acquire and allocate resources and to influence others. Position power sometimes is viewed as directive behavior and is most effective when expressed downward. Position power is of little, if any, value when expressed upward or laterally.

The pluralistic/political model explores two additional bases of power: individual and departmental. *Individual power* refers to the factors and experiences that reside within a person. Individual power remains with a person as he or she moves from situation to situation. *Departmental power,* on the other hand, is fixed within the department or work unit.

Individual Power Bases

Greiner and Schein identify eight bases of individual power that might be used when one is attempting to influence others. These eight bases are classified under the following categories: *knowledge, personality,* and *others' support.*

1. A ***knowledge*** power base contains the subsets of expertise, information, and tradition.
   - *Expertise* power refers to acquired, specialized credentials (gained through education and experience) that give a person the status of *expert* (one who knows more than anyone else about a particular subject).
   - *Information* power refers to the ability to create, to manipulate, and to direct specific information toward selected people.
   - *Tradition* power refers to a person's store of historical information about the organization, usually gained through seniority, which the person can use to influence others.
2. A ***personality*** power base contains the subsets of charisma, reputation, and credibility.
   - *Charisma* power refers to a person's ability to inspire devotion and enthusiasm in others.
   - *Reputation* power refers to a power source resulting from others' favorable opinions of one's abilities and competence.
   - *Credibility* power refers to one's professional stature, usually gained through professional exposure, participation in professional meetings, and association with professional organizations.
3. An ***others' support*** power base contains the subsets of political access and staff support.
   - *Political access* refers to one's connections within the organization—in other words, the ability to utilize various social and professional relationships within the organization to one's advantage.
   - *Staff support* refers to the development of individual staff members' power bases.

Departmental Power Bases

Departmental power bases relate directly to the function of the department or work unit. Greiner and Schein offer three bases of power that a department can use when attempting to influence others. Departmental power bases are categorized according to the department's *ability to cope with uncertainty,* the degree to which it *shares knowledge,* and its *centrality.*

1. ***Ability to cope with uncertainty.*** Organizational environments often are mercurial and uncertain. Departments that can manage uncertainty effectively often gain power within the organization. Departments can manage ambiguity and uncertainty by:
   - *Stabilizing or minimizing uncertainty* (such as by securing additional work);
   - *Providing information that reduces uncertainty*, (such as by forecasting future business conditions); and
   - *Absorbing uncertainty*, (such as by developing a means for coping with uncertain conditions).
2. ***Sharing of knowledge.*** Some departments do not allow other departments to learn how their work is accomplished. If no other department within the organization has sufficient knowledge or skills to carry out the first department's tasks, that department will be in a higher power position (none can take its place) and probably will be able to influence the distribution of organizational resources.
3. ***Centrality.*** Centrality refers to others' perception of a department's importance to the organization. For example, if a production department is perceived as critical to the organization's growth and renewal, the production department is in a position of centrality and probably can influence the distribution of organizational resources.

POWER STRATEGIES

Having a basis from which to express power is not nearly enough to influence others. Those in a position to express power must be proficient in choosing and applying appropriate power strategies. Based on their research, Greiner and Schein identify three broad classifications of power strategies used by people who can influence others successfully. These three categories are use of social networks, playing it straight, and circumventing the formal system.

Use of social networks consists of the following substrategies:

- Forming alliances and coalitions,
- Dealing directly with key stakeholders and decision makers, and
- Using internal and external contacts for information.

Playing it safe consists of:

- Using information to persuade others,
- Focusing on the needs of the target group, and
- Persistence.

Circumventing (going around) the formal system involves:

- Working around obstacles, and
- Not being constrained by organizational rules.

Greiner and Schein believe that power strategies are closely related to individuals' power bases within organizations. Therefore, certain strategies are effective only when used in conjunction with a particular power base. For example, the strategy of using social networks is associated with power based on others' support; the strategy of playing it straight is associated with power based on expertise, information, and tradition knowledge; and the strategy of circumventing the formal system is associated with power based on personality. Thus, using a particular power strategy does not necessarily ensure success in influencing others. One also must possess an appropriate power base.

IMPLICATIONS

An understanding of organizationally based power is essential to the accomplishment of work-related objectives. In order to influence others successfully, one must understand one's personal power base and the power bases of others and must adopt a strategy that complements one's personality. As one's skills in the use of power increase, one's degree of influence in acquiring organizational resources increases proportionately. Implicit in this discussion of power is the assumption that power is beneficial for aiding the distribution of organizational resources. Although it is true that the power often supports goal attainment, it also can be applied improperly. Power then becomes detrimental and even dysfunctional.

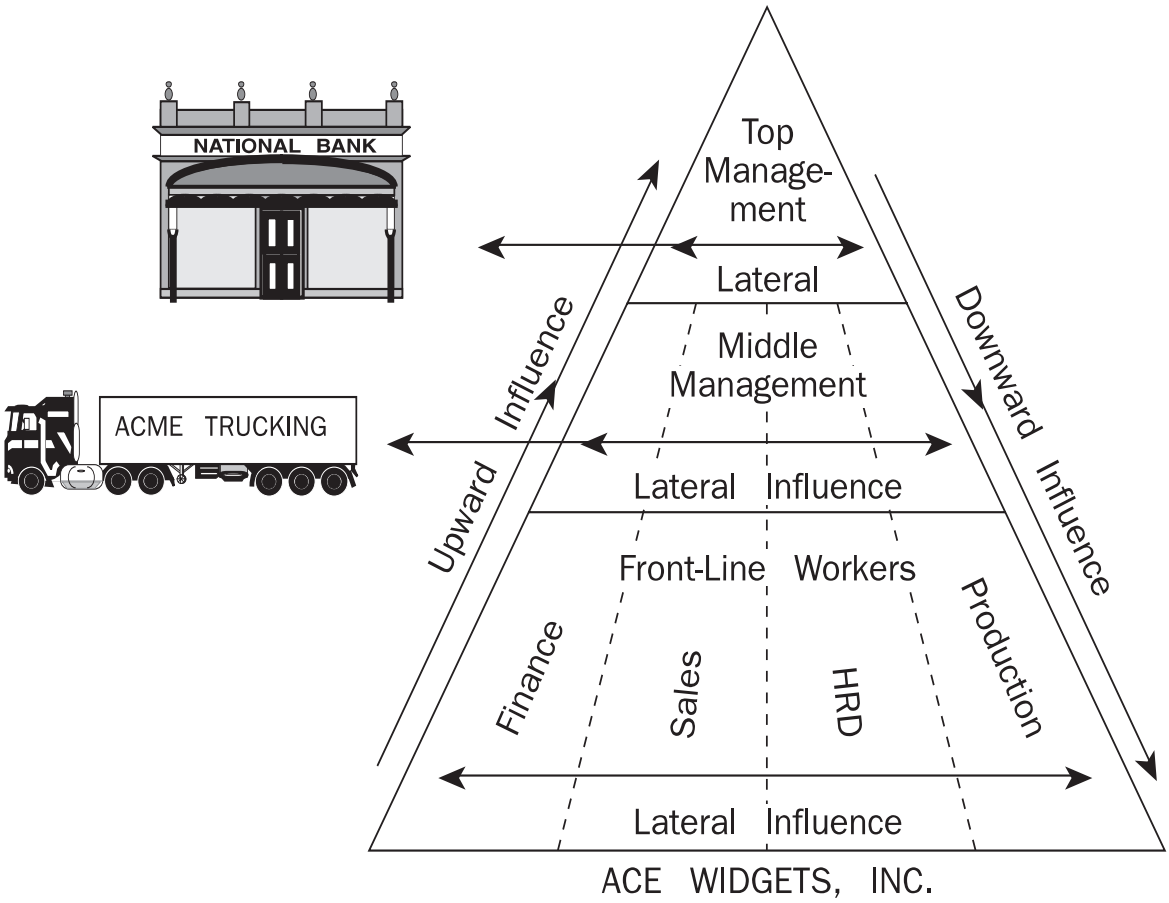
This "dark side" becomes reality when power strategies are combined with *deception*—that is, using work activities to conceal selfish interests and to promote a hidden agenda. Greiner and Schein believe that the *intent* of those exercising power is the main factor in determining whether or not power contributes to organizational effectiveness. Intent is categorized as either *job-related* or *self-oriented.* Simply put, if job-related interests are given priority, the use of power is likely to be functional. However, if self-interests are a priority, the use of power is likely to become dysfunctional and detrimental.

REFERENCES

French, J.R.P., Jr., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power.* Ann Arbor, MI: Institute for Social Research of the University of Michigan.

French, W.L., & Bell, C.H. (1984). *Organization development: Behavioral science interventions for organization improvement* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Greiner, L.E., & Schein, V.E. (1988). *Power and organization development: Mobilizing power to implement change.* Reading, MA: Addison-Wesley.

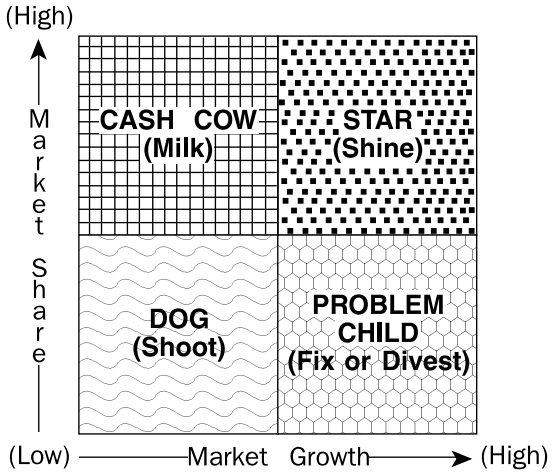


Three Directions of Influence

PRODUCTIVITY-POTENTIAL MODEL

THE BOSTON CONSULTING GROUP'S PRODUCT-ANALYSIS MODEL

An innovative way of describing the effectiveness of people in organizations can be extrapolated from the classic product-analysis model developed by the Boston Consulting Group. Their two-dimensional model, depicted in the figure that follows, evaluates products in terms of their market share and their potential for market growth (Pfeiffer, 1984).

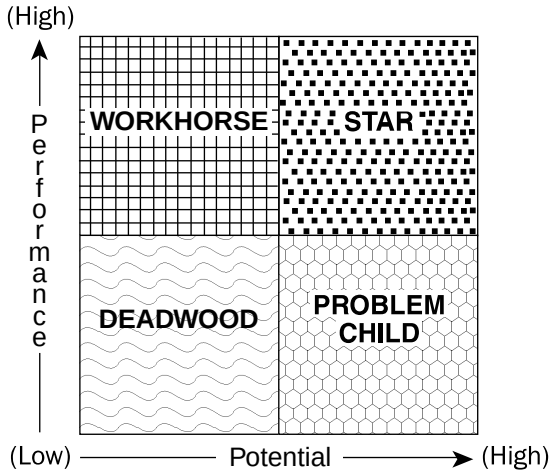


Product-Analysis Model Developed by the Boston Consulting Group

The market-share axis indicates the amount of market share commanded by the product being analyzed. The market-growth axis indicates the product's potential for growth in terms of future sales. A product that is low in both existing market share and potential for market growth is called a "dog" because what one does with an old, ailing dog is put it out of its misery. Products that are low in market growth but high in market share are called "cash cows"; obviously, one milks these. Products that are low in market share but that have growth potential need to be developed; these are the "problem children." If these can be developed efficiently—to command both high market share and high market growth—they become "stars." If not, they are divested or dropped. Marketing energy is best put into shining the stars.

ODIORNE'S EMPLOYEE-PERFORMANCE MODEL

George Odiorne creatively extended the Boston Consulting Group's product-analysis model to describe employee performance. The two dimensions in Odiorne's model (see the figure below) are the employee's *performance* and *potential.* Odiorne labels people who are low in performance and low in potential "deadwood." Those who are high in performance but low to moderate in potential are called "workhorses." These are the people who do most of the work in organizations. Employees who are high in potential and relatively low in performance are again called "problem children." Finally, those who are high in both performance and potential are the "stars." The implications of and remedies for these classifications are analogous to those in the marketing model.



Performance-Analysis Model Developed by George Odiorne

PFEIFFER'S PRODUCTIVITY-POTENTIAL MODEL

To take the performance-analysis model a step further, one can substitute the word "productivity" for "performance" (Pfeiffer, 1986). In the last few years, organizations have laid off or otherwise divested themselves of many people who were low in both potential and productivity—the "deadwood." Thus, the deadwood probably does not account for one-fourth of the employee population, as the matrix model would imply, but for approximately one-sixteenth, as the figure on page 155 depicts. In the same vein, the stars probably do not account for a quarter of the working population either—again, perhaps only for one-sixteenth of it. The workhorses—the people who keep organizations moving—probably compose almost half of the work force. People who are high in potential and low in productivity can be described as either "problem children" or "trainees" in this extension of the model. They number about three-sixteenths of the employee population, and different strategies are called for with each individual. Finally, a large group of people are consistently below average in

performance and who vary greatly in terms of potential. These are the “marginal” employees. They form approximately one-fourth of the employee population.

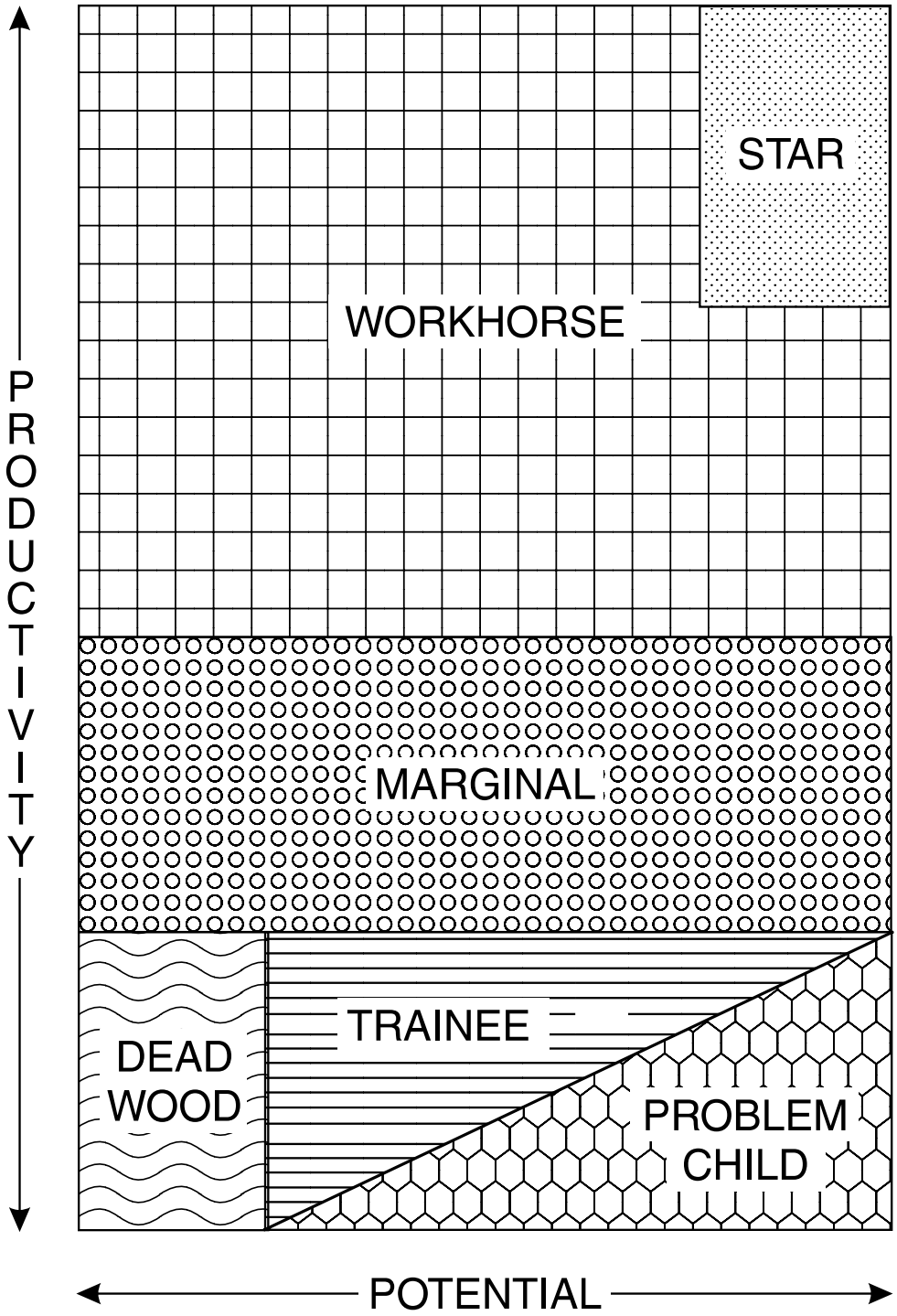
EMPLOYEE EFFECTIVENESS PROFILE

The productivity-potential matrix profile is the basis for the *Employee Effectiveness Profile (EEP)* (Pfeiffer, 1986), an instrument that allows managers to use the model to rate their employees. The description of employee-ratings categories provides guidance in determining what type of management or coaching is required for each type of employee. The instrument also contains information about dealing with marginal employees. Performance-review sessions, management training, team-building sessions, and the like lend themselves to the use of the model and the instrument.

SOURCES

Pfeiffer, J.W. (1984). Encouraging managers to deal with marginal employees. In J.W. Pfeiffer and L.D. Goodstein (Eds.), *The 1984 annual: Developing human resources.* San Diego, CA: Pfeiffer & Company.

Pfeiffer, J.W. (1986). *Employee effectiveness profile (EEP).* San Diego, CA: Pfeiffer & Company.



Productivity-Potential Matrix Profile

SCIENTIFIC MANAGEMENT

Frederick Taylor (1911) pioneered the concept of *scientific management.* He believed that by scientifically analyzing and designing jobs, labor and management together could create a profit large enough to provide ample remuneration both for the workers and for the organization. However, Taylor's words often contradicted his apparently balanced and equal theory. For example, Taylor described a worker as follows: "One of the very first requirements for a man who is fit to handle pig-iron...is that he shall be so stupid...that he more nearly resembles in his mental makeup the ox than any other type" ("Hearings," 1912). He also said, "If you are a high-priced man, you will do exactly as [you are told]...from morning till night. When [told] to pick up a pig and walk, you pick it up and you walk....When [told] to sit down and rest, you sit down....And what's more, no back talk" (Taylor, 1911, p. 46). In addition, Upton Sinclair, a popular exposé writer of the time, noted that Taylor "gave about 61 percent increase in wages, and got 362 percent increase in work" (in Copley, 1923, p. 30).

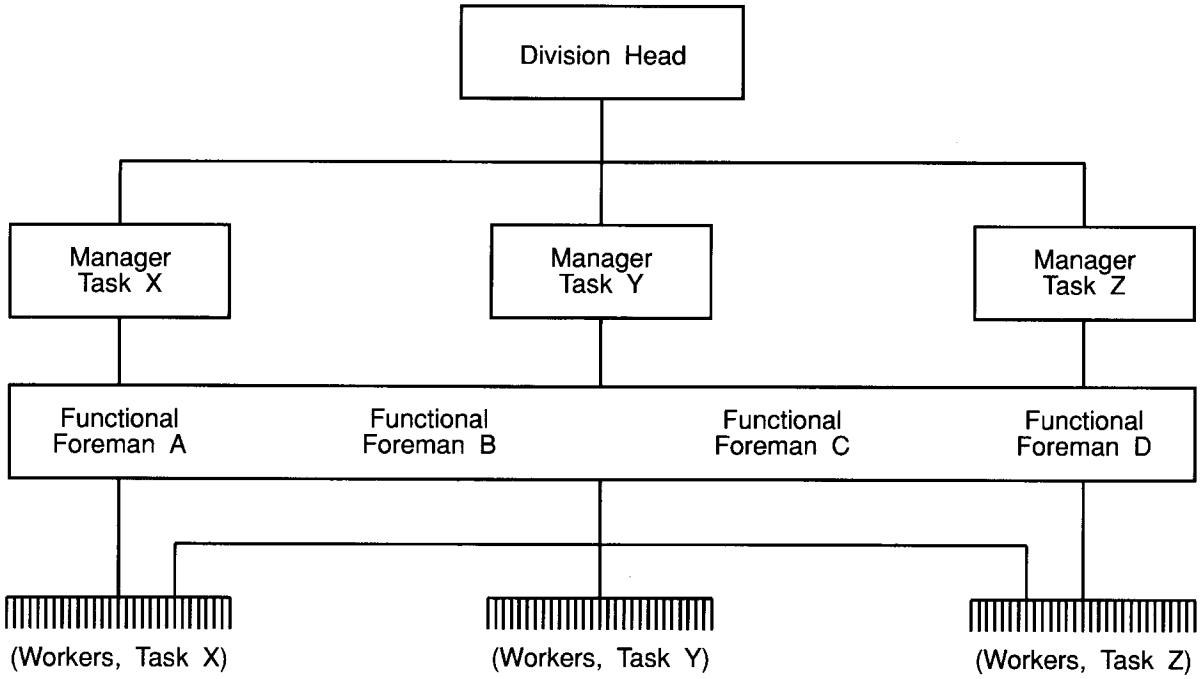
THE TIME-AND-MOTION STUDY

Taylor's approach involved fractionating jobs through time-and-motion studies. For many years, this approach was the defining characteristic of modern industrial work, and many industries still use time-and-motion-studies to design jobs. Unfortunately, it was years before organizations began to realize the tremendous psychological damage that was being done to hundreds of thousands of workers by carrying these methods to an extreme.

SOME INNOVATIVE IDEAS

Despite the flaws in Taylor's theory of scientific management, he did have some interesting—and quite radical—ideas. He did not endorse the "chain-of-command" principle (one worker/one supervisor). In Taylor's design, which is depicted in the figure on the next page, each worker is supervised by a number of "functional foremen" who are expert teachers and trainers rather than traditional overseers. In practice, Taylor's concept of the functional foreman failed. It never was fully implemented and soon was forgotten for two reasons: (a) it threatened management's sense of control, and (b) it was a far more complex design than was warranted by the nature of jobs at the turn of the century.

Years later, a somewhat changed version of Taylor's ideal structure would be known as a *matrix* organization (Davis & Lawrence, 1977). Even so, matrix organizations differ substantially from those in Taylor's model because jobs typically are complex and technically demanding rather than fractionated and technically simple.



Taylor's Ideal Structure

REFERENCES

Copley, F.B. (1923). *Frederick W. Taylor: Father of scientific management.* New York: Harper & Row.

Davis, S.M., & Lawrence, P.R. (1977). *Matrix.* Reading, MA: Addison-Wesley.

Hearings before special committee of the House of Representatives to investigate the Taylor and other systems of shop management under authority of House resolution 90. (1912). (Publication No. 1388-1389). Washington, DC: U.S. Government Printing Office.

Taylor, F.W. (1911). *Scientific management.* New York: Harper.

SOURCE

Sashkin, M. (1981). An overview of ten management and organizational theorists. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1981 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

THE SEVEN-S FRAMEWORK

The book *In Search of Excellence* is the result of an extensive study by Peters and Waterman (1982) of what they labeled America's most "excellent" organizations. Over a period of several months in 1979 and 1980, Peters and Waterman studied seventy-five organizations and interviewed members of about half of these organizations. The other companies were studied by examining media reports and annual reports. As they looked at the concept of "organization," Peters and Waterman discovered that there were several aspects of organizational *structure* that were common to the organizations studied. They then developed criteria for organizational success, which were originally defined as the following seven variables: "structure, strategy, people, management style, systems and procedures, guiding concepts and shared values (i.e., culture), and the present and hoped-for corporate strengths or skills" (Peters & Waterman, 1982, p. 9).

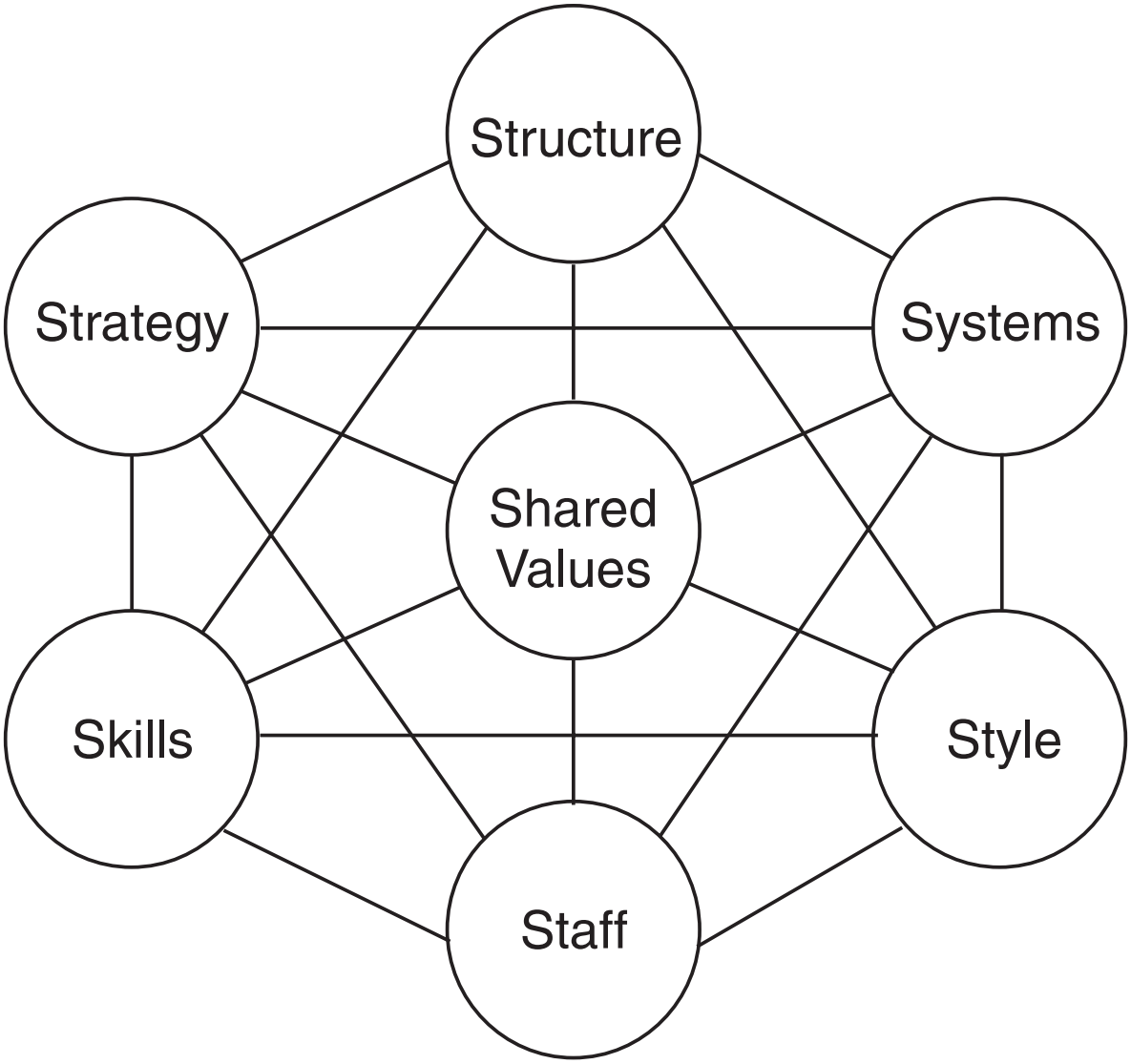
Peters and Waterman then assembled these seven variables into a framework and, to make the model easier to remember, changed the names of the variables so that each one started with the letter "S."

Structure
Systems
Style
Staff
Skills
Strategy
Shared Values

The seven-S model was considered eye-opening because it focused attention on the fact that managers and corporate leaders have not one, not two, but seven factors that must be correctly and carefully managed in order for an organization to excel, to produce goods and services of high quality, to satisfy its customers, to fulfill its employees, and to make a profit. Of course, the larger the organization, the more difficult it becomes to institute sweeping reforms in order to achieve these goals. The model is named for McKinsey, a large organization that was the primary financial backer for Peters and Waterman's study.

REFERENCE

Peters, T.J., & Waterman, R.H., Jr. (1982). *In search of excellence: Lessons from America's best-run companies.* New York: Harper & Row.



McKinsey Seven-S Framework

Reprinted from T.J. Peters & R.H. Waterman, Jr., *In Search of Excellence: Lessons from America's Best-Run Companies.* New York: Harper & Row, 1982. Used with permission.

THE SIX-BOX MODEL

The six-box model of organizational diagnosis, developed by Marvin R. Weisbord (1976, 1978), identifies six interrelated processes inherent in all organizations. Weisbord notes that process issues usually are systemic (part of the organization's management culture), and that this culture can be described in two ways:

- The "fit" between *organization* and *environment*—the extent to which purposes and structure support high performance and ability to change with conditions; and/or
- The "fit" between *individual* and *organization*—the extent to which people support or subvert formal mechanisms intended to carry out an organization's purposes.

Weisbord devised the six-box model to enable managers and consultants to put into perspective whatever theories and concepts they already know, along with whatever problems arise, in order to aid them in diagnosing an organization's problems.

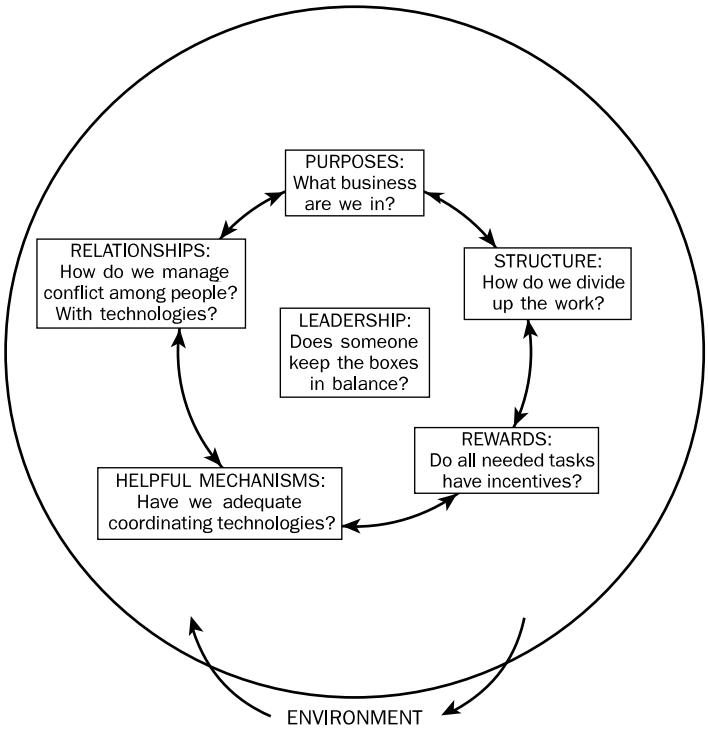
ORGANIZATIONAL ENVIRONMENT

As can be seen in the figure on the next page, organizations exist in environments—forces that are difficult to control from inside and that demand a response. Such forces include customers, governments, unions, families, and communities. The interactions between any organization and its environment—particularly the management of the boundary conditions—need to be understood. Although organizations are "open systems," they must establish some boundaries, and judgments must be made about where these lie. A boundary can be drawn around contracts, lines of business, formal membership, and similar areas. Within the boundary, the six boxes interact to create an input-output system whose function is to transform resources into goods or services.

FORMAL AND INFORMAL SYSTEMS

In each of the six boxes, two aspects require attention: the formal and the informal systems that operate within each. Neither system is better; they exist side-by-side. Diagnosing the *formal* system is based, in part, on the organization's statements, charts, and reports, and on how it is organized. After comparing the organization's rhetoric with its environment, one must decide whether everything fits. Diagnosis of *informal* systems focuses on the frequency with which people take certain actions in relation to how important these actions are for organizational performance. One questions whether the system as designed meets the needs of the people who have to operate it. Lack of fit

between the formal and informal systems may indicate why performance is not what it should be.



Weisbord's Six-Box Model[*]

Purposes

When we examine an organization's *purposes,* we must be concerned with both the formal goal clarity and the informal commitment to those goals. Goal clarity must exist before goal agreement is possible. People's purposes are some balance between "what we have to do" and "what we want to do" (for growth, self-expression, idealism, and so on). The result is priorities.

Ill-defined or overly broad purposes create anxiety. When people disagree on priorities, conflict exists. Some individuals may resist efforts to focus organizational efforts because their individual power is based on the existing confusion or diffusion. The questions to be asked are: "Are this organization's purposes ones that society values and will pay for?"; "How well articulated are these goals in the formal system, for both producers and consumers?"; and "To what extent do people understand and support the organization's purposes?"

[*] Reproduced by permission of Marvin R. Weisbord, Block Petrella Weisbord, Inc., Plainfield, N.J.

Structure

When we study *structure*, we need to be aware of the formal organizational chart and the informal ways in which work actually is accomplished (or not accomplished). A consultant must look for the fit between the goal (output) and the structure producing it (formal system), then notice how the work actually is assigned and performed and how people use or subvert the organizational chart.

Organizations can be structured in three ways: by function (specialists working together); by product, program, or project (multiskilled teams working together); or by a mixture of both. In a *functional* organization, division of labor, budgets, promotions, and rewards all are based on special competence. Functional bosses have the most influence on decisions and generally seek to maximize their own goals, not the organization's. Intergroup conflict is more common; big decisions may pile up at the top; few members have the overall picture; and it is difficult to shift directions rapidly. On the other hand, there is support for competence; people at each level speak the same language; and there is freedom to specialize and enhance one's skills. Functional organizations are stable. They work best where environment and technologies change slowly, when quick response is not essential, and when in-depth competence is necessary.

In contrast, *product-line* (or program or project) organizations work better in fast-changing environments. In such organizations, people do multiple tasks and integrate skills around one output. Coordination with other teams is minimal, cutting down intergroup conflict. Rewards, promotions, and influence go to those who can integrate resources to innovate, produce, and deliver a product or service quickly. The flip side is that in-depth competence erodes in each specialty. Innovation is restricted to existing areas. Groups may compete for resources. Internal task conflicts may make division of labor on each team an issue.

When organizations decentralize, they often change from functional to product structure, improving the informal system at an eventual cost to formal needs. Some organizations try to have it both ways, using the matrix model. A better form is the mixed model, in which some units are functional and some programmatic. This mixed model provides maximum flexibility because it can shrink or expand as needed. It provides multiple career paths, rewarding both special and integrative skills. However, there are drawbacks in terms of human limitation. Ambiguity is high, and conflict management is necessary. To be wholly effective, a mixed organization needs two budget lines, two bosses, dual reward systems, and so on. Such mechanisms are complicated and expensive. Although required when the stakes are high (such as for saving lives or for landing on the moon), such structure rarely is necessary if simpler forms will serve.

Relationships

The formal aspects of *relationships* involve who deals with whom on what issues; the informal aspects involve the quality of those relationships. Three types of work relationships are most important:

- ***Between people (peers) or boss-subordinate;***
- ***Between units that do different tasks;***
- ***Between people and their technologies (for example, systems or equipment).***

In the formal system, the consultant should diagnose such relationships in terms of how much interdependence is required to get the work done. There are two possible dysfunctions: (a) people need to work together and do not do it well; or (b) people do not need to work together, but try to force collaboration (in the belief that they should).

A second level of relationship diagnosis relates to the degree of built-in conflict. The more people or units work together to achieve organizational results, the more the quality of their relationships matters. Some units (such as sales and production) always may be in conflict; this is legitimate because each unit needs to see things differently from the other in order to do its work. Such conflict is potentially useful and should be managed rather than suppressed.

A third important issue is how conflict is managed. Typical conflict-management patterns include:

- ***Forcing:*** allowing more powerful people to have their way.
- ***Smoothing:*** reducing differences by pretending that there are none; organizing all units in the same way.
- ***Avoiding/Suppressing:*** making it "disloyal" to raise disagreements openly.
- ***Bargaining:*** negotiating differences, holding some cards, narrowing the issues, and playing for maximum advantage.
- ***Confronting:*** opening all issues and data to inspection by both parties; creating mechanisms to surface all aspects of disagreement and to initiate problem solving.

Rewards

When examining an organization's *rewards* or incentives system, one must consider both the explicit system of salaries, wages, bonuses, and the like, and the more implicit rewards of how members of the organization respond emotionally to successful task accomplishment and how much support for achievement there is in the system. Having a formal reward system does not guarantee that people will feel or act as if they are rewarded. Studies of motivation indicate that a reward system that pays only salary and fringe benefits is inadequate unless people value their work and perceive in it a chance to grow. The fit between person and organization improves when there is a chance for growth, responsibility, and achievement.

A second important issue is "equity" or fairness among members of the organization. People's feelings or beliefs determine whether or not they *act* as if they are rewarded. In industrial systems, incentive pay based on production may not work because of peer pressure against rate breaking. In universities, the rewards for research

may be psychologically more potent than the rewards for teaching. Consultants need to ask what the organization says it pays for or rewards, what it actually rewards, and what people *feel* rewarded or punished for doing.

Leadership

In the area of *leadership,* one needs to note both what the management responsibilities of the leaders are and how effectively they carry out these responsibilities. There is evidence that different management styles are more or less effective depending on the situation. The best a manager can do is to try to understand the organization and its requirements and then judge how much his or her usual style contributes to or blocks progress and how possible it would be to learn new skills. Although interpersonal skills are necessary (and most functional in unstructured situations), they contribute little to organizational performance in the absence of goal clarity and goal agreement.

The four essential *leadership tasks* seem to be defining purposes, embodying purposes in programs, defending institutional integrity, and managing internal conflict. Much turmoil in organizations—especially at administrative levels—results from the failure of leadership to accomplish these four tasks. Leaders should know where the trouble spots are and how they affect the organization. Leaders need to scan the six boxes, look for problems in both formal and informal systems, and fix them appropriately. This task can be shared but not delegated. Leadership requires, in addition to behavioral skill, an understanding of the environment and a will to focus purposes, especially if there is a problem in one of the six boxes. A large part of a leader's role is to use mechanisms designed to keep formal and informal systems in balance.

Helpful Mechanisms

Mechanisms are the procedures, policies, meetings, systems, committees, bulletin boards, memos, reports, spaces, information, and so on, that facilitate efforts related to the contents of all the other boxes. Mechanisms typically facilitate problem solving, planning, budgeting, control, and measurement (information). An effective organization continually revises its mechanisms as the need arises. Problems with mechanisms are understood most easily by observing the flow of work at the points at which it seems clogged.

The formal aspects of *helpful mechanisms* involve the establishment and management of these functions (for example, rational planning, budgeting, control, and measurement systems). The informal aspects involve how well, if at all, these mechanisms are used. This aspect includes corrective feedback.

USE OF THE MODEL

The six-box model provides a useful overview of the critical components of organizational life, using organizational/environmental, sociotechnical, and formal/informal systems concepts. It is a framework that can be applied in various

settings, particularly to guide OD diagnoses and interventions. It allows consultants to apply whatever theories they wish when doing diagnoses and to discover new connections between apparently unrelated events.

Three levels of diagnosis are recommended:

1. ***Does the organization fit its environment?***
2. ***Is the organization structured to carry out its purposes?***
3. ***Are the organization's norms in phase with its intent? What discrepancies are there between the formal and informal systems?***

Data Collection

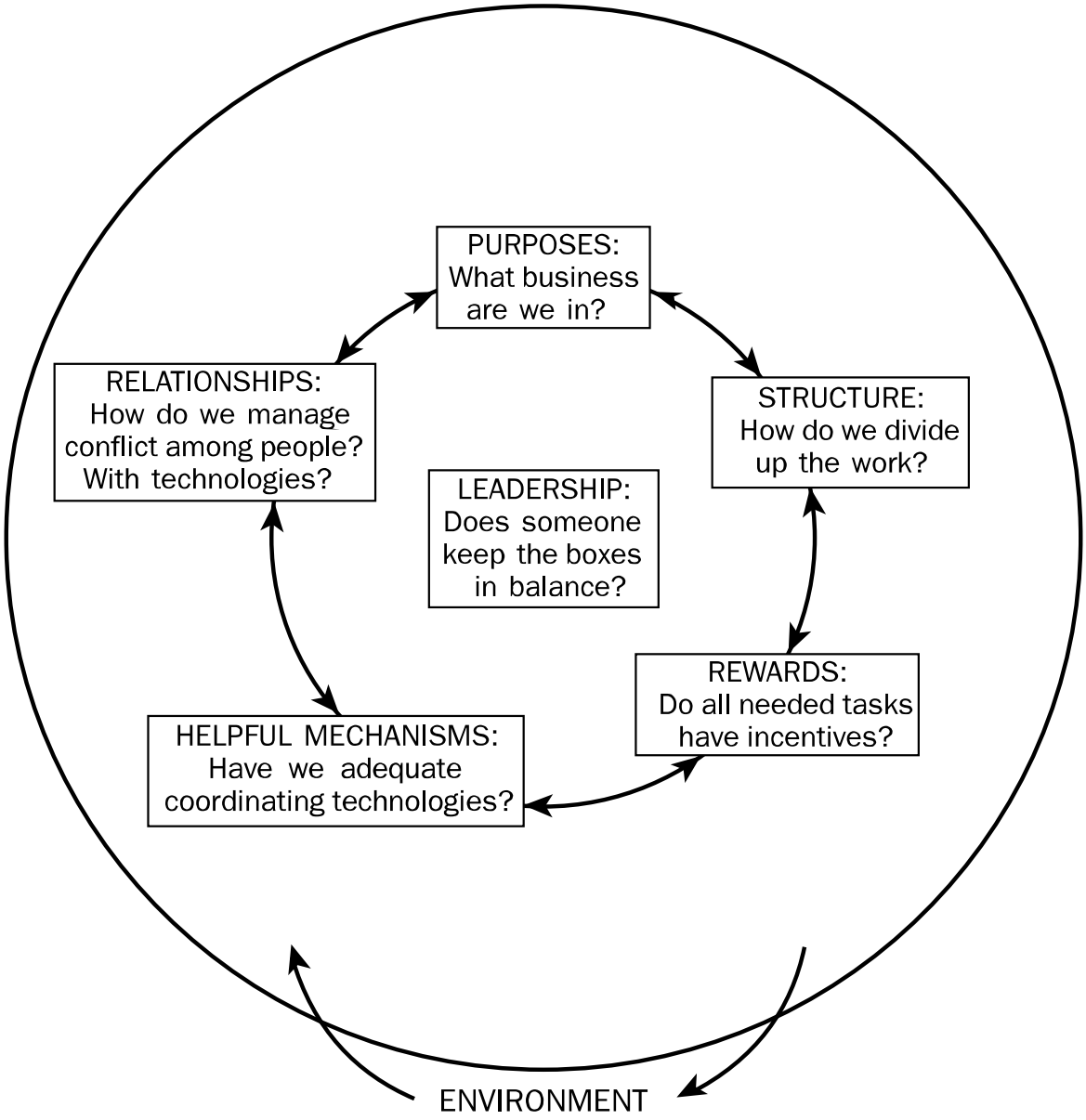
There basically are four ways in which to collect organizational data: observation (in meetings, on the job), reading (reports, charts, and so on), interviews, and survey-feedback methods. All four methods can be used to identify discrepancies between what people say (formal) and what they do (informal) and between what the organization is and what it ought to be.

REFERENCE

Weisbord, M.R. (1978). *Organizational diagnosis: A workbook of theory and practice.* Reading, MA: Addison-Wesley.

SOURCE

Weisbord, M.R. (1976). Organizational diagnosis: Six places to look for trouble with or without a theory. *Group & Organization Studies, 1*(4), 430-447.



Weisbord's Six-Box Model

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SOCIOTECHNICAL SYSTEMS

All theories of organizational design contain assumptions about organizations and about people. *Sociotechnical-design* theorists believe that organizations are composed of people (a social system) who use *technical systems* (tools, methods, and skills) to produce products and services (Pasmore, 1988). Thus, a sociotechnical-systems (STS) approach emphasizes the interactions among an organization's environmental, social, and technical systems.

ORIGINS OF STS THEORY

The STS approach was developed in the 1950s and 1960s at the Tavistock Institute. Over a dozen behavioral scientists, including Kenneth Bamforth (Trist & Bamforth, 1951), Wilfred Bion (1961), Wilfred Brown (1960), P.G. Herbst (1974), Elliot Jaques (1951), Eric Miller and A.K. Rice (1967), A.K. Rice (1958), and Einer Thorsrud (Emery & Thorsrud, 1976) have been involved with this theory. However, Emery and Trist (1960) are the names most commonly attached to the theory of STS (Pasmore & Sherwood, 1978).

The STS concept literally started at the bottom of a coal mine. Trist and Bamforth (1951) were studying the use of new work methods in the mining industry. What they found was that under certain conditions, the new methods were impractical. However, workers had solved the problem by reviving the practice of small-group team mining, which had been abandoned at the time of semi-mechanization in the 1940s (Trist, Higgin, Murray, & Pollock, 1963). The team mining approach not only solved the technical problems but was more well-suited to the miners' needs, such as for strong social contact when faced with dangerous tasks. The concept that Trist and Bamforth (1951) pioneered was brilliantly simple: The technological system used in an organization must fit or mesh properly with the social system if the organization is to operate effectively.

In the mid-1950s, another British researcher confirmed the above theory. Joan Woodward's (1965) intent was to test some basic principles of management by studying whether very profitable firms did, in fact, follow this principle more closely than did less profitable firms. However, Woodward's hypothesis did not hold up under testing. There appeared to be no relationship between effectiveness and adherence to management principles. This seemed odd because some principles were considered common sense, such as the proper "span of control" or average number of workers to be supervised by a first-line manager.

Woodward (1965) re-examined her data and discovered a pattern. All of the measures seemed to differ by industry. The industries were crudely categorized by the

type of technology used: production of individual units, mass production, or continuous-process production. Examples of the first would be the manufacture of locomotives, of hand-knit sweaters, or of one-of-a-kind, high-technology items. The second type is the traditional assembly-line operation. The third represents high-technology products that are manufactured in a continuous process, such as oil or chemicals. Each basic technology type did differ in number of levels of hierarchy, span of control, ratio of managers to nonmanagers, and a number of other variables. This indicated that the principles did not seem to be universal but were modified depending on the organization's technology. As for effectiveness, Woodward showed that the more effective organizations consistently were characterized at about the average or mean value on each measure. In other words, there seemed to be a best method of organization to fit each type of technology. Firms that stayed close to this best approach for their technical systems were most effective. Organizations that had too many or too few levels of hierarchy, too wide or too narrow a span of control, or too small or too large a manager/worker ratio for their type of technology were least profitable. The support of Woodward's findings for the STS approach is striking, especially when one realizes that Woodward worked independently and was unaware of the Tavistock STS approach.

ORGANIZATIONS AS SYSTEMS

The concept of organizations as systems is not new. Simply put, systemic views espouse that organizations take *inputs* such as raw materials, human resources, and capital from the environment and internally process or convert them into *outputs* such as products, goods, and services. Obviously, organizations rely on these environmental inputs to survive and to prosper. Organizations supply other organizations with inputs by producing products, goods, and services that can be exchanged in the marketplace for continued inputs.

Sociotechnical theorists regard organizations as *open systems* that actively engage in transactions with a variety of environmental systems. Environmental systems are external to organizations and include legislative and regulatory systems, cultural and belief systems, economic systems, and raw-material systems. As open systems, organizations exist within the context of these larger systems and rely on them as sources of input. Likewise, environmental systems rely upon organizational output. The effect is one of multidirectional influence, in which organizations as well as environments are shaped by reciprocal interaction.

From a sociotechnical perspective, organizations are also systems that contain two interdependent subsystems: *social* and *technical.* From these subsystems we get the term *sociotechnical.*

SOCIAL SYSTEMS

According to sociotechnical theory, social systems include all variables associated with people and with human interaction in the workplace. Social systems exist because people in organizations interact at three separate yet interdependent levels: *individual*, *group*, and *organization.* According to Pasmore (1988), these levels include:

1. ***Individual:*** Includes human variables and individual differences in motivation; knowledge, skills, and abilities; learning capabilities; flexibility and adaptability to change; attitudes toward participation; and personal histories.
2. ***Group:*** Includes variables such as group cohesiveness; stages of group development; quality of group process; natures of group norms; nature of the group's function; availability of resources; effects of reward systems on cooperation; membership compatibility and stability; and levels of group autonomy are included.
3. ***Organization:*** Includes variables such as organizational culture; departmental and hierarchical boundaries; reward systems; supervisory and control mechanisms; job-design standards; performance standards and expectations; employee-involvement opportunities; labor and management relations; and psychological contracts between the organization and its members.

Thus, in sociotechnical analysis, social systems are the fundamental basis of organizational adaptation and performance. Pasmore (1988) argues that even though social systems create problems and are constrained by human limitations, they provide the basis for organizational change, renewal, and innovation. Consequently, organizations are not likely to change, to improve, or to continue to exist without the support of their social systems.

TECHNICAL SYSTEMS

Sociotechnical theory defines *technological systems* as including all operational and administrative tools, processes, methods, and procedures used by people to accomplish tasks. Technical systems govern the efficiency and effectiveness with which environmental inputs are converted into acceptable outputs.

Because social systems are the fundamental basis of organizational adaptation and performance, technical systems in many ways predispose social systems to particular kinds of behavior. Therefore, technical systems influence organizations' ability to adapt to changing external environments. This is not to say that technical systems *cause* organizational behavior; however, the social aspects of organization are affected significantly by technical arrangements. For example, technology drives the manner in which technological processes are utilized. As a result, various roles develop, which in turn lead to situations in which some roles are perceived as more prestigious than others. Thus, issues of status, power, and influence emerge as people position and focus their attention on status-maintenance behaviors. According to Pasmore (1988), the influence

of technological systems on social system processes and behavior also can be examined at the individual, group, and organizational levels.

1. ***Individual.*** At the individual level, technology affects work design, productivity, self-perceptions, and psychological contracts.
2. ***Group.*** At the group level (such as in departments and in functional units), technology affects role structures, physical layout, leadership behavior, interaction patterns, and intradepartmental relationships.
3. ***Organization.*** At the organizational level, technology affects organizational structure, interdepartmental relationships, reward systems, organizational flexibility, and competitive posturing.

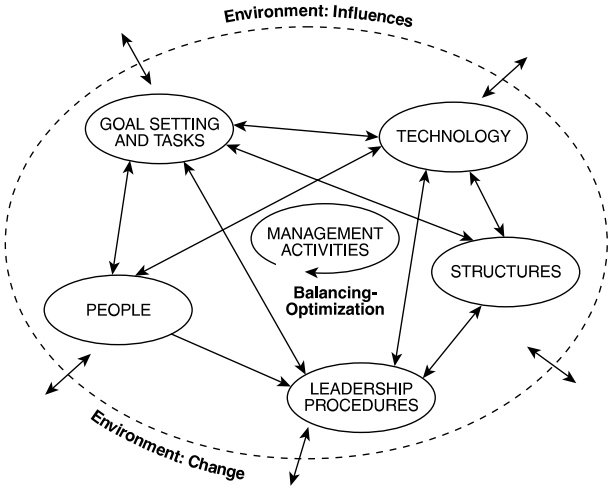
Accordingly, the effects of technology on social-system behavior and the effects of social-system behavior on technology take the form of multidirectional shaping through reciprocal interaction.

IMPLICATIONS OF STS THEORY

Sociotechnical-systems theory provides insight into the interactive and systemic natures of the social, technical, and environmental components of an organization. Organizations designed without sociotechnical considerations tend to be constrained by obstacles not present in systems designed with sociotechnical concerns in mind. Pasmore (1988) argues that constraints in organizations designed without these concerns exist because of:

- ***Overspecialization of most jobs;***
- ***Over-reliance on supervisors to control employee behavior;***
- ***Too much investment in maintaining business as usual (the status quo);***
- ***Breakdowns of interdependent systems and activities;***
- ***Overcentralization of information and authority;***
- ***Over-reliance on individual monetary rewards;***
- ***Undervaluing of human resources;***
- ***Over-reliance on technology as a solution to organizational problems;*** and
- ***Lack of attention to the external environment.***

Bridger (1977) created the following model of a sociotechnical system.

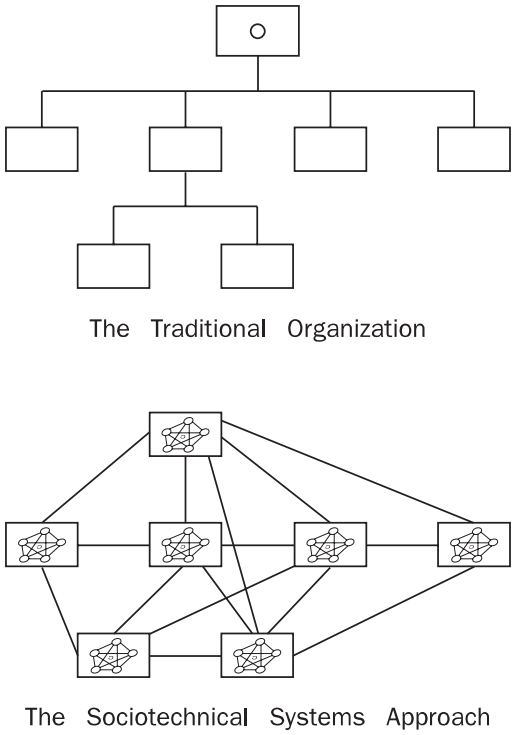


ENVIRONMENT:	The organization as a system in a continuous exchange with a turbulently changing environment
PEOPLE:	Values, claims, attitudes, education, group and peer ties, leadership behavior, power relationships, and dependencies
GOAL SETTING AND TASKS:	The primary purpose and task of the organization in terms of delivering goods and services at a profit
TECHNOLOGY:	Administrative resources and procedures, accounting, information systems marketing, sales, advertising, investment goods, production, etc.
STRUCTURES:	Division of labor, hierarchy, communication and leadership structures, organizational structure, etc.
MANAGEMENT ACTIVITIES:	Selection, evaluation, and promotion systems, wage and salary systems, control and monitoring systems
LEADERSHIP PROCEDURES:	Balancing and design processes that are required to run the entire system

Bridger's Pentagram Describing a Sociotechnical System[*]

Incorporating Bridger's model, the figure that follows illustrates the differences in structure between traditional organizations and sociotechnical-system organizations.

[*] From Harold Bridger, "The Value of the Organization's Own Systems in Coping with Stress." *Proceedings of the International Committee on Occupational Mental Health Congress,* New York, 1977.



A Comparison of Traditional and Sociotechnical Views of Organizations

Sociotechnical perspectives of organizations offer not only a way of viewing system interdependencies; they also stress that human potential within the organization must be maximized. For Pasmore,

> Effective organizations are those which produce excellent results by any measure of costs, quality, or efficiency while simultaneously enhancing the energy and commitment of organizational members to the success of the enterprise. (1988, p. 1)

Correctly applied, sociotechnical design aids organizations in achieving excellence by developing human resources in order to:

- ***Utilize social and technical resources effectively;***
- ***Cultivate employee commitment and energy;***
- ***Maximize cooperative efforts;***
- ***Encourage innovation;*** and
- ***Remain alert to changes in the external environment.***

However, unlike older approaches, STS theory does not pretend to offer a cure for all organizational ills. As Trist (1980) put it,

> Environmental turbulence has become such a strong dynamic that I'm a pessimistic optimist. I'm scared...about what will happen on a large scale during the next few decades. We may well be faced with wholesale unemployment as technological advances continue to replace workers. The "management of decline" may become a new approach as resources are exhausted and various

aspects of our economy wind down. Our focus has been on micro processes, yet we must try to do something at macro levels, at the large-scale system level. (p. 166)

REFERENCES

Bion, W.R. (1961). *Experiences in groups.* New York: Basic Books.

Bridger, H. (1977.) The value of the organization's own systems in coping with stress. In A. McLean, G. Black, & M. Colligan (Eds.), *Reducing organizational stress. Proceedings of the International Committee on Occupational Mental Health Congress,* New York Hospital-Cornell Medical Center, May 10-12.

Brown, W. (1960). *Exploration in management.* London: Heinemann.

Emery, F.E., & Thorsrud, E. (1976). *Democracy at work.* Leiden, The Netherlands: Martinus Nijhoff.

Emery, F.E., & Trist, E.L. (1960). *Socio-technical systems.* Oxford, England: Pergamon Press.

Herbst, P.G. (1974). *Socio-technical design*. London: Tavistock.

Jaques, E. (1951). *The changing culture of a factory.* London: Tavistock.

Miller, E.J., & Rice, A.K. (1967). *Systems of organization.* London: Tavistock.

Pasmore, W.A. (1988). *Designing effective organizations: The sociotechnical systems perspective.* New York: John Wiley.

Pasmore, W.A., & Sherwood, J.J. (1978). *Sociotechnical systems: A sourcebook.* San Diego, CA: Pfeiffer & Company.

Rice, A.K. (1958). *Productivity and social organization: The Ahmedabad experiment.* London: Tavistock.

Trist, E.L. (1980). Interview: Eric Trist, British interdisciplinarian. *Group & Organization Studies, 5*(2), 144-166.

Trist, E.L., & Bamforth, K.W. (1951). Some social and psychological consequences of the longwall method of coal-getting. *Human Relations, 4,* 3-38.

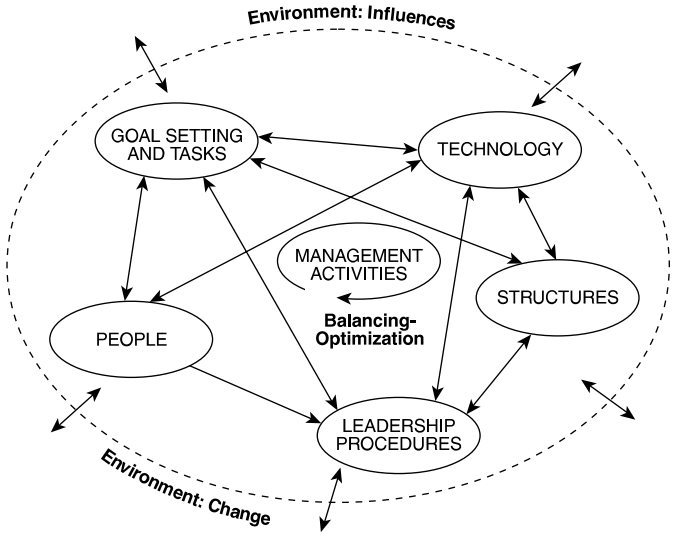
Trist, E.L., Higgin, G.A., Murray, H., & Pollock, A.B. (1963). *Organizational choice: Capabilities of groups at the coal face under changing technologies: The loss, re-discovery and transformation of a work tradition.* London: Tavistock.

Woodward, J. (1965). *Industrial organization: Theory and practice.* London: Oxford University Press.

SOURCES

Sashkin, M. (1981). An overview of ten management and organizational theorists. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1981 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

Zobrist, A., and Enggist, R.E. (1984). Sociotechnical systems thinking in management consulting: A holistic concept for organization development. In J.W. Pfeiffer & L.D. Goodstein (Eds.), *The 1984 annual: Developing human resources.* San Diego, CA: Pfeiffer & Company.



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From Harold Bridger, "The Value of the Organization's Own Systems in Coping with Stress" *Proceedings of the International Committee on Occupational Mental Health Congress,* New York, 1977.

STRATEGY AND STRUCTURE

Large, decentralized, industrial enterprises have become a modern institution. This organizational structure did not appear spontaneously; rather, it emerged to meet the needs produced by changing business conditions and environments. Alfred D. Chandler, Jr. (1962) presented a history of American enterprise in which he stated that the decentralized, multidivisional structure of large organizations is an evolutionary response to growth and change within the American economy.

BASIC PRINCIPLES OF INDUSTRIAL ENTERPRISE

Chandler was most interested in the ways in which changing environmental conditions affect organizational structures and strategies. Chandler focused his efforts on *industrial enterprises*, which he defined as "large private, profit oriented business firms involved in the handling of goods in some or all of the successive industrial processes from the procurement of the raw material to the sale to the ultimate customer" (1962, p. 8).

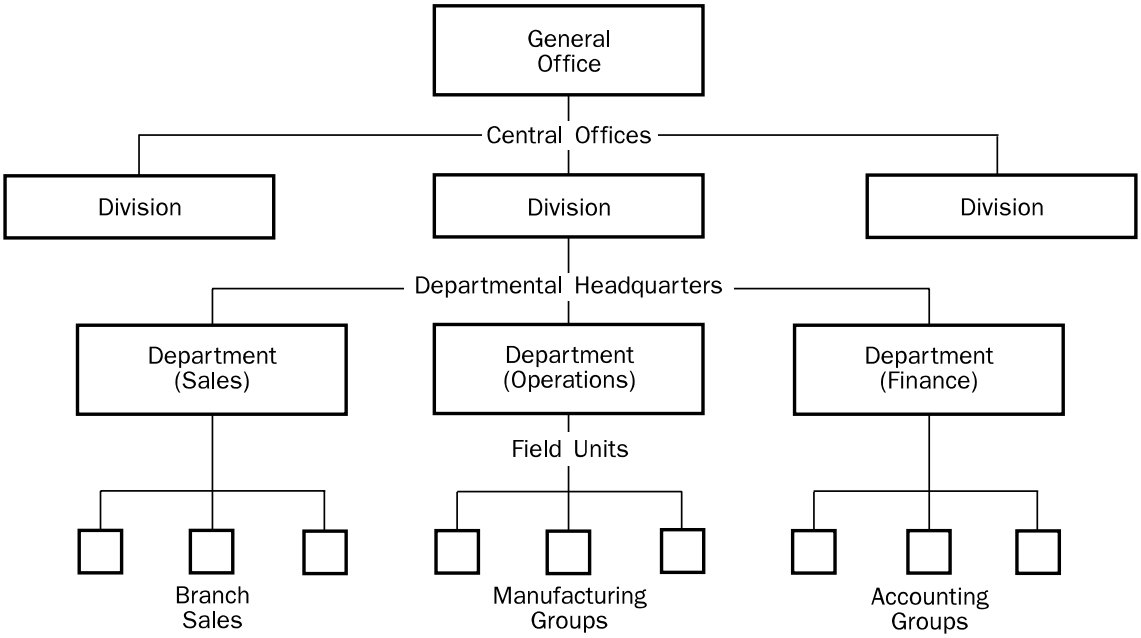
Thus, for Chandler, industrial enterprise is *capitalistic* and takes on a life of its own. Even so, the enterprise still needs people to administer its affairs. *Administration* is an integral part of enterprise and is defined as the "executive decisions, action, and orders that take place while coordinating, appraising, and planning the work of the enterprise and allocating its resources" (Chandler, 1962). As an organizational activity, administration addresses two fundamental concerns: the organization's long-term health and its short-term health. Long-term health is determined by decisions that affect the allocation or reallocation of resources, and short-term health is determined by decisions about resources that already have been allocated. For Chandler, administration differs significantly from the everyday, hands-on *operational aspects* of organizational work.

Multidivisional Structure

Decision makers in modern, multidivisional, decentralized enterprises administrate from four types of offices: *general, central, departmental headquarters,* and *field units.* Each type of office manages a different kind of administrative content. The organizational chart on the next page depicts the relationships between the four offices.

- ***General offices*** (corporate headquarters) contain the highest-ranking executives. General offices are responsible for the long-term survival of a number of relatively autonomous central offices. The general office determines the organization's overall direction and policies, allocates resources, and coordinates the activities of all central offices. For example, the headquarters of General Motors is responsible for all products and services produced by the General

Motors enterprise. To facilitate the administrative processes, General Motors subdivides into relatively autonomous and self-contained divisions (central offices) such as the Chevrolet Motor Division, Pontiac Motor Division, and so on. Each division is responsible for all aspects of one product line.



The Multidivisional Organizational Structure[*]

- ***Central or divisional offices*** oversee a particular product line or geographical region. Each division (central office) is responsible for the division's direction, the allocation of divisional resources, and the coordination and administration of a number of *departmental headquarters.* For example, Chevrolet Motor Division is responsible for all aspects of the production of Chevrolet vehicles. These responsibilities include designing and engineering, procurement of raw materials, manufacturing, and marketing.
- ***Department headquarters*** are responsible for the administration of major divisional functions (personnel, engineering, procurement, manufacturing, marketing, finance, and so on). Each department is responsible for a number of field units.
- ***Field units*** are the lowest subunits of the enterprise. Each is responsible for a functional operating unit such as a branch, a district, sales, or finance.

Thus, general offices manage central offices; central offices manage department headquarters; and department headquarters oversee field operations.

[*] Adapted from Chandler (1962). *Strategy and Structure: Chapters in the History of the Industrial Enterprise.* Cambridge, MA: MIT Press.

HISTORY OF THE COMPLEX ENTERPRISE

Chandler hypothesized that different environments require enterprises to develop different strategies, and that the structure of the enterprise must follow its strategy. Strategy is defined as the organization's *long-term goals and course of action,* and structure is defined as the *organizational design* through which the enterprise is managed. Chandler suggests that strategy can be thought of as:

- Lines of authority and communication; and
- Information flow through the lines of authority and communication.

Modern industrial enterprise usually is managed by well-trained and specialized full-time administrators. This is a very significant change; prior to 1850 there was little need for full-time administrators. Most enterprises were family owned and operated and produced only enough to meet the family's needs and the needs of a small, local community. Yet larger enterprises—such as railroads, limited manufacturing, and textiles—did exist. However, operations and distribution were localized, and day-to-day business was relatively easy to monitor. For example, a "larger" enterprise before 1850 was the railroad, but railroads were less than fifty miles in length, and day-to-day operations were simple and uncomplicated. What little administration was required was done by the president, and little thought was given to future operations. These small-scale enterprises were composed of what Chandler called *embryonic administrative structures.*

Beginning around 1850, enterprises began to expand; still, there was little need for large-scale administration. However, the east-west railroad link altered administrative needs significantly. The completion of a transcontinental link brought into reach markets that once were inaccessible. Consequently, markets for nearly all goods and services expanded. Expanding markets encouraged innovation and technological advances, which, in turn, encouraged expansion and further production. The railroads in particular experienced tremendous growth; their operating horizons increased, and the management of day-to-day operations became more complex. New systems emerged as the railroads grew, and a post-embryonic form of administration appeared.

According to Chandler, Daniel McCallum, then the General Superintendent of the Erie Railroad, was one of the first to recognize formally that new systems were needed. McCallum's new systems included:

- ***Clear definitions of authority and lines of communication*** (including some of the first organizational charts); and
- ***Improved information flow from outlying operational areas.***

Still, the railroads' environment remained relatively noncompetitive, and the focus remained on short-term, day-to-day operations.

Following the Civil War, the demand for goods and services increased as people moved to the newly accessible western states. By the end of the 1880s, most farmland

had been settled, and the pattern of national growth turned toward urban industrial and commercial centers. From 1880 to 1890, the American population increased 28 to 40 percent, adding to the consumer demand. Organizations responded by growing and expanding; they increased production, constructed new plants, and expanded to additional locations. By the end of 1896, most large enterprises employed full-time administrators.

Increasing operational complexity brought about a new challenge: designing organizational structures that would complement the expansion. At first, the emphasis was on field units; administration remained within centralized corporate offices. Then, organizations began to realize that administration requires different kinds of people with different skills and temperaments. This realization and the focus on field units led to the addition of more functions *(vertical integration)* and increased specialization. Chandler notes that this trend formed the basis for Frederick Taylor's (1911) theory of scientific management. Still, field units and department headquarters were managed by and remained accountable to a single, centralized office.

A shift in markets and technology began in the late 1870s and the early 1880s. Prior to 1880, most steel was produced for the railroads and to support the construction of a national rail network. However, by 1880, basic national railroad structures were in place, and steel markets shifted to urban construction. This meant that steel manufacturers now had a diversified customer base that required greater quantities and product variation. Larger sales forces were required, leading to the development of internal marketing departments and branch (field) offices. In addition, laws regulating the purchase of stock made it favorable for enterprises to expand and to diversify through acquisitions and mergers. The difficulties of managing diversified organizations, products, and services made the need for well-defined administrative systems obvious. Organizations that once had little interest in systematic administration began adopting long-term administrative processes.

Prior to 1920, no organization had designed a structure for a general office that effectively could manage autonomous divisions. At the same time, the marketplace was demanding that industrial enterprises expand existing product lines, find new markets and sources of supplies for their products, and develop new products for new and expanded markets.

Multidivisional, decentralized structures arose as a means of managing increased diversity and complexity. Organizations began to address issues such as coordination of product flow, acquisition of materials and supplies, and the manufacture and marketing of diverse product lines to dissimilar markets. Thus, the multidivisional administrative structure that did not exist prior to 1920 became the standard structure for complex and diverse organizations after 1960.

IMPLICATIONS OF THE STRATEGY-AND-STRUCTURE PROCESS

Chandler says that the historical role and function of administration in large enterprises is to plan and direct the use of organizational resources in ways that corresponded with the long- and short-term demands of the marketplace. Administrative responsibilities require a degree of direction, strategy, and structure. Chandler's historical perspective points out four fundamental phases that led to the development of multidivisional, decentralized enterprises:

- ***Initial expansion and accumulation of resources;***
- ***Rationalization of the use of resources;***
- ***Expansion into new markets and product lines;*** and
- ***Development of new structures*** that made it possible to use resources to meet both changing short-term market demands and long-term market trends.

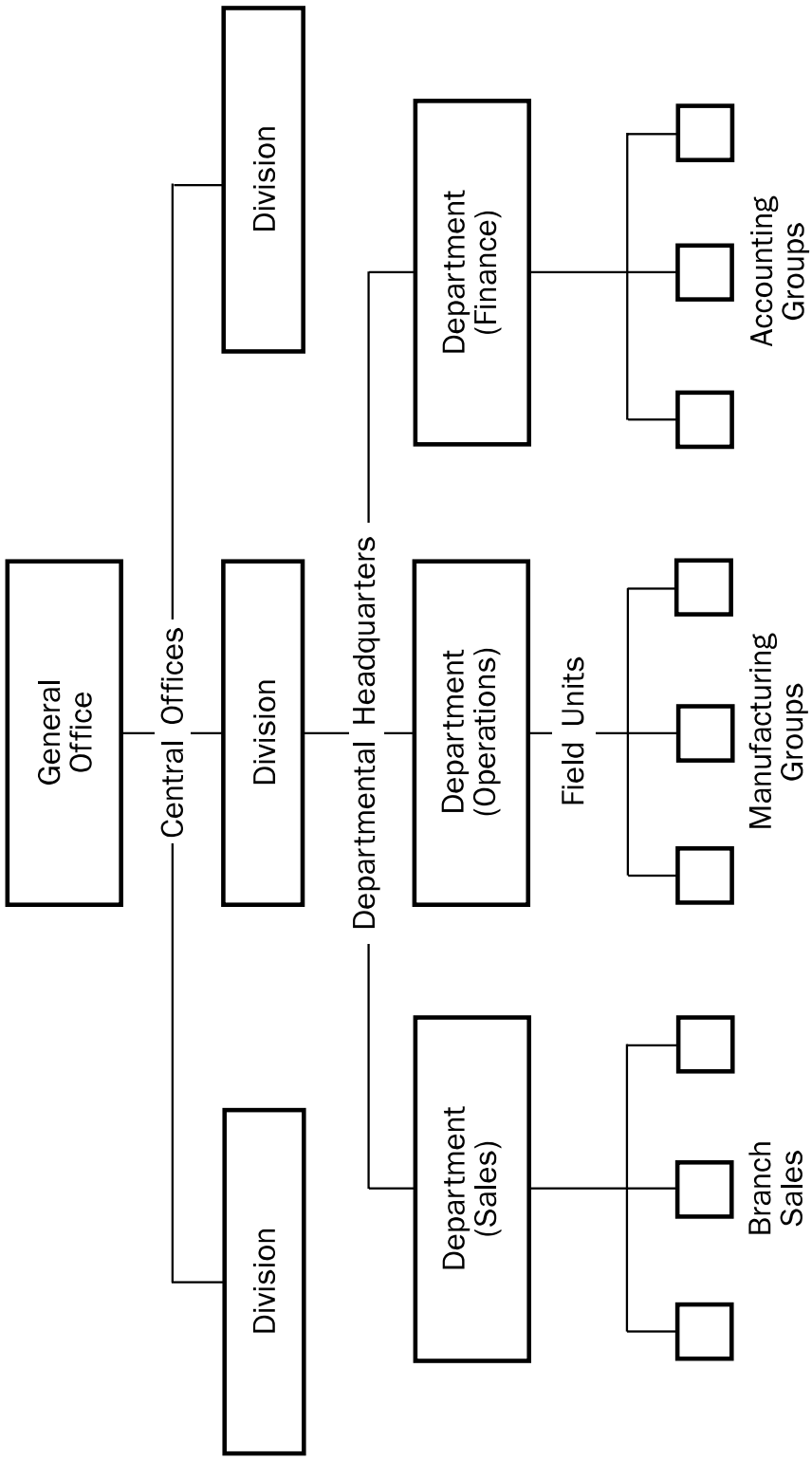
Environmental changes and the nature of available resources produced changes in organizational strategies, which were followed by revised organizational structures. Thus, *changes in structure followed changes in organizational strategy; and changes in organizational strategy followed changes in the marketplace.*

Modern organizations also are confronted by changing environments and markets. However, the rate of change has increased dramatically. If it is true that history repeats itself, then drastic changes in organizational strategy are forthcoming—changes that will affect organizational structures, methods of leadership, and methods of communication. These changes will be necessary both for effectiveness and for survival.

REFERENCES

Chandler, A.D., Jr. (1962). *Strategy and structure: Chapters in the history of the industrial enterprise.* Cambridge, MA: MIT Press.

Taylor, F.W. (1911). *Scientific management.* New York: Harper.



The Multidivisional Organizational Structure

Adapted from Chandler (1962). *Strategy and Structure: Chapters in the History of the Industrial Enterprise.* Cambridge, MA: MIT Press.

STREAM ANALYSIS

Changing environments, whether external or internal, present organizations with major challenges and opportunities. Change creates demands on organizations and their members. Organizations must respond to these demands or cease to function effectively. Fundamental managerial responsibilities involve the identification and resolution of problems brought about by environmental demands and changes. High levels of managerial skills in planning, implementing, and managing change efforts are valuable organizational assets.

INTRODUCTION TO STREAM ANALYSIS

Jerry Porras (1987) believes that there are three fundamental causes of failed organizational-change efforts:

- ***Faulty or incomplete diagnosis;***
- ***Failure to plan systematically;*** and
- ***Nonexistent or inadequate follow-up.***

Porras introduced the *stream analysis* method of diagnosing and planning organizational change. Porras believes that this method supplements many contemporary approaches to the planning of change in that its use minimizes the potential for failure. Stream analysis is grounded in systems theory. Organizations are viewed as open social systems that comprise various interrelated and interdependent subsystems. Porras conceptualizes each subsystem as "consisting of streams of similar variables" that are "connected either causally or merely relationally to other variables both within their same stream and across others" (p. 7). Porras states that *streams* are composed of the following variables: *organizing arrangements*, *social factors, technology,* and the *physical setting.*

- ***Organizing arrangements*** are related closely to the formal organization and include structural variables such as mission, goals, and strategy; hierarchical structure; administrative processes, procedures and systems; administrative expertise; and reward systems.
- ***Social factors*** are part of the informal organization; they include human variables such as departmental and organizational culture; interaction processes; social patterns and networks; leadership; and the attributes, attitudes, and beliefs of individual members.

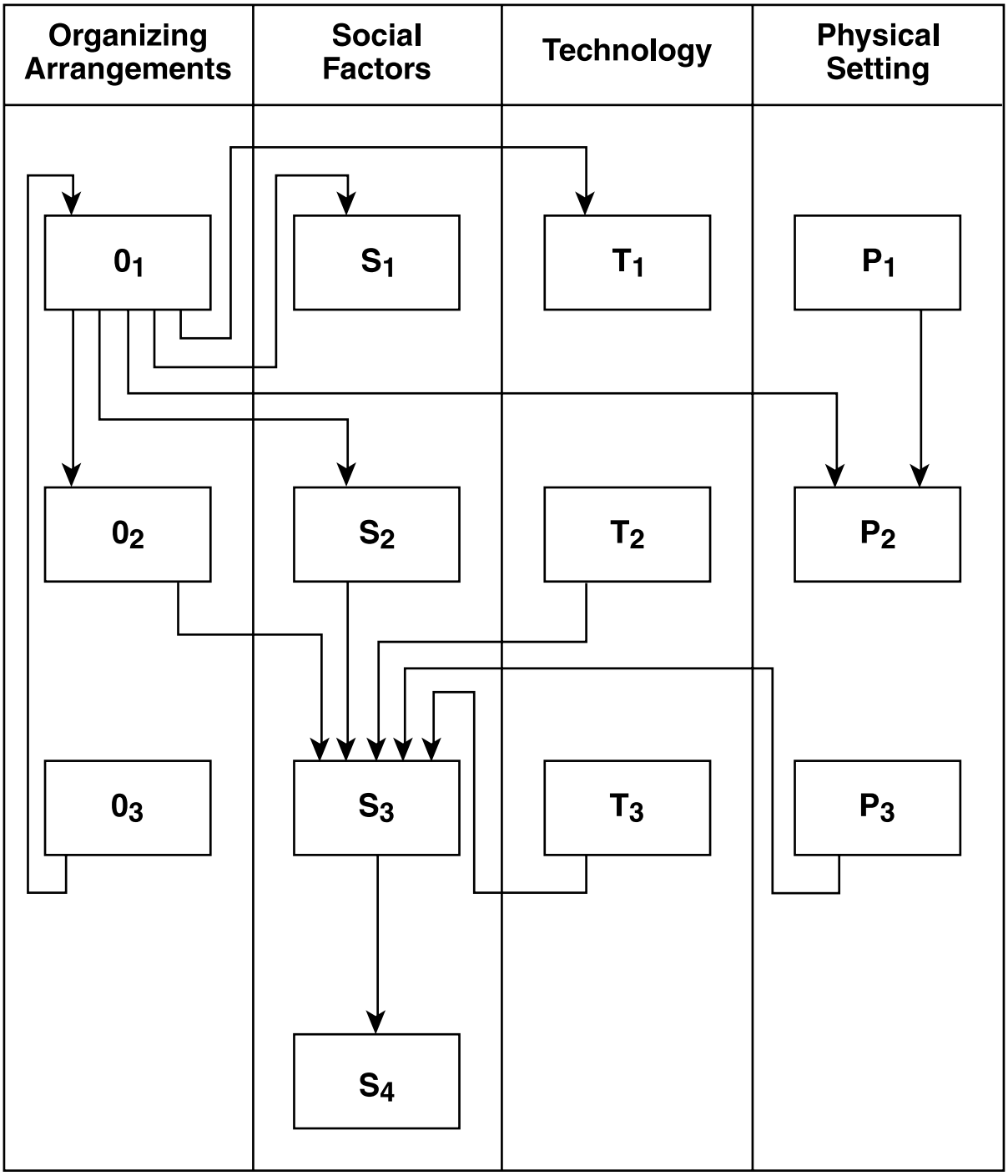
- ***Technology,*** from a systems perspective, converts organizational inputs into outputs (products and services) such as tools, machinery and equipment; job and work-flow design; technical processes, procedures, and systems; and technical expertise.
- ***Physical settings*** are tangible artifacts of the nonsocial and technical settings. Included in physical-setting streams are organizational structures (such as buildings) and their associated architectural and interior designs, along with the physical ambiance of the environment (such as lighting, temperature, noise, and air quality).

Organizational streams are very much like natural streams. Throughout the flow, the internal elements within natural streams continually interact with and affect one another while simultaneously interacting with and affecting elements beyond the stream's boundaries. Similarly, organizational streams—organizing arrangements, social factors, technology, and physical settings—flow within loosely defined organizational boundaries through an organizational system in which internal stream elements continually interact with and affect one another while simultaneously interacting with and affecting elements beyond their boundaries. The figure on the next page illustrates the organizational-stream phenomenon.

THE STREAM PROCESS

The stream-analysis process consists of seven steps that guide managers through change efforts.

1. ***Formation of a change-management team (CMT).*** Porras recommends that the CMT consist of a cross-sectional grouping of people, including people with extreme points of view. Such a grouping can provide valuable information that often is overlooked when groups are composed of people whose thoughts are similar. If such a group cannot be formed, Porras suggests forming a group consisting of key managers who support the change effort. The purpose of the CMT is simply to "guide and monitor the change process" (p. 18).
2. ***Collect data on the organization's problem.*** Porras equates data collection to taking a "snapshot" of the problem area. Ideally, information should be collected from all members of the organization. However, this often is not possible in large systems. Data can be collected by means of interviews, questionnaires, observation, and analyses of the organization's records. Data collection results in the generation of statements regarding the problem.
3. ***Categorize the problem statements.*** Problem statements are presented to the CMT for review, discussion, and placement into one of the four organizational streams. Porras asserts that a shared understanding of problem statements is the key to the categorization process. As problems are categorized, they are placed on a *diagnostic stream chart.*



An Example of Stream Analysis

Reprinted with permission from J.I. Porras (1987), *Stream Analysis: A Powerful Way To Diagnose and Manage Organizational Change*. Reading, MA: Addison-Wesley.

Stream Charts

Stream analysis is unique in its use of graphics to portray the components of planned change—diagnosis, planning, and intervention. According to Porras, it is difficult to use systems theory to explain the complex interrelationships that occur in organizational settings. Stream analysis is intended to supplement systems perspectives by providing a visual representation of the interrelationships among problems.

Three main stream charts are used: *diagnostic, planning,* and *tracking.* The preceding figure depicts a diagnostic stream chart, showing the manner in which problems are categorized and interrelationships are displayed. Note that the stream chart is divided into four columns that match Porras's organizational dimensions ("streams"). Porras acknowledges that his labels are not all-inclusive and that some users may prefer to label organizational dimensions differently.

4. ***Identify the interconnections*** between problems that have been charted. When establishing interconnections, it is wise to focus on "causality" and to resist any tendency to overwhelm the process by spending too much time and effort on "relatively unimportant relationships." The direction of causality is extremely important and is represented graphically by an arrow pointing from a particular driving variable to the variable being driven (see figure).
5. ***Analyze the diagnostic chart.*** This analysis involves tracing the identified interconnections throughout the diagnostic chart. There are three basic problems that can be identified easily with a diagnostic chart: core problems, symptoms, and fundamental core problems.

Problems that drive other problems are labeled *core problems.* Solving a core problem facilitates the resolution of and decreases the magnitude of all of the problems that it drives. *Symptoms* are problems that are driven by several other problems and that are highly visible on diagnostic charts because of several arrows that point to them. Naturally, resolution of the problems causing the symptoms significantly reduces the symptoms. *Fundamental core problems* are seemingly unconnected to anything beside a core problem. Porras states that often there is not a fundamental core problem or it cannot be identified readily, but when it exists, its resolution results in "maximum bang for the buck."

Diagnostic charts also allow for the analysis of *stories and themes.* Stories are represented graphically by a more-or-less vertical linkage of problems. Stories tend to depict more difficult and complex problems within the organizational stream. A *theme* is represented by a more-or-less horizontal pattern on the chart, which may not be linked conventionally but nevertheless addresses a central concern.

6. ***Formulate an action plan*** appropriate for solving the identified problems. Action plans should not be projected too far into the future because they may tend to become counterproductive. Action plans are plotted on a *stream-planning chart* that adds a time dimension to a chart that is very similar to the stream diagnostic chart.

7. ***Track the intervention process.*** Once organizational problems have been diagnosed and detailed solutions have been planned, implementation can be monitored with a *tracking chart.* A tracking chart provides a basis for reviewing the progress of change interventions and allows the organization to learn how changes should be implemented in the future. The tracking chart follows a pattern similar to the diagnostic and planning charts; the only difference is that tracking charts describe what actually has happened (what actually was done, both planned and unplanned). Armed with this information, managers can begin to analyze the actions that aided and inhibited the change process. A secondary benefit, according to Porras, is that tracking charts provide a means of communicating information regarding change activities throughout the organization.

IMPLICATIONS

Stream analysis was developed primarily as a tool for the management of complex organizational change. Porras asserts that users of stream-analysis procedures will be aided in their efforts to improve organizational effectiveness and performance. For Porras, the stream-analysis process is particularly effective because of its ability to:

- Increase organizational awareness and understanding of the causal issues that drive organizational performance;
- Facilitate the collective diagnosis and planning that tend to increase organizational commitment to change efforts;
- Utilize charts that are nonthreatening and that tend to reduce the resistance toward and mistrust of change processes;
- Present complex organizational problems and their interconnections simply and in a flexible manner; and
- Bring a systemic perspective to planned organizational change.

REFERENCE

Porras, J.I. (1987). *Stream analysis: A powerful way to diagnose and manage organizational change.* Reading, MA: Addison-Wesley.

SUPERLEADERSHIP

Management practices that once were effective now hamper organizations' abilities to adapt to rapidly changing environments. Charles Manz and Henry Sims (1989) contend that many organizations are ineffective because they continue to manage according to traditional models of leadership, models that are based on formalized power, authority, and employee controls. Today's organizations need leaders who can capitalize on the self-leadership capabilities of their subordinates. Manz and Sims believe that *superleadership* (leading others to lead themselves) is required.

Superleadership is different from traditional views of leadership in that the focus is on the long-term potential for employee self-management. Superleadership assumes that:

- ***Employees are self-directed*** (control over the employee comes from within the employee);
- ***The effects of management and organizational controls depend on the ways in which the controls are perceived, evaluated, and accepted by employees;*** and
- ***Effective leaders must influence the ways in which employees lead themselves.***

SELF-LEADERSHIP

Traditional models of leadership support the position that employees require external direction in order to be successful and productive. However, Manz and Sims suggest that people are *self-leading* (internally controlled). Therefore, leadership by others (external controls) should function to awaken people's internal *leadership energy* and motivation. Manz and Sims point out that self-leadership is the engine that provides the energy for success. The concept of self-leadership is based on three primary assumptions:

- ***Everyone practices some degree of self-leadership; however, not everyone is an effective self-leader;***
- ***Self-leadership is applicable to everyone who works in an organization—executives, managers, and nonmanagers;*** and
- ***Self-leadership can be learned.***

In the context of superleadership, self-leadership is a form of "responsible followership" in which employees accept responsibility for their performance and productivity. Self-leadership consists of two classes of self-imposed leadership strategies: *behavioral* (action) and *cognitive* (thinking and feeling).

Behavioral Strategies

Behavioral strategies are self-leadership action strategies taken in order to constructively direct one's performance toward excellence. These action strategies are:

1. ***Self-imposed goal setting*** in order to establish self-direction and priorities. Self-imposed goals are an important component of self-leadership; they focus on the task at hand, on professional development, and on personal growth. Goals must be challenging, attainable, and specific in order to be effective and reachable.
2. ***Self-management of cues in the workplace*** in order to stimulate preferred behavior and to inhibit unwanted behavior. Manz and Sims cite examples such as limiting telephone interruptions and posting inspirational messages as ways to influence constructive work behavior.
3. ***Mental rehearsal*** of important tasks can improve job performance greatly. Role playing and mental rehearsal are examples of positive preperformance behavior.
4. ***Self-observation of consequences*** focuses on what happens once the task has been completed. Observation of what produces preferred or unwanted outcomes can help employees to determine what further actions are needed.
5. ***Self-administered rewards*** can be extraordinarily strong reinforcers for preferred behavior. Self-administered rewards can be *physical and concrete* (such as an ice cream cone as a reward for completing a difficult task on time) or *private* (such as mental images of expected rewards or of an anticipated event). Self-administered rewards, both physical and mental, help to nourish internal motivation and to stimulate effort.
6. ***Self-administered punishments*** at times are useful to the self-leadership process. However, Manz and Sims believe that they usually are ineffective and that most self-administered punishments actually are *cognitive* rather than *behavioral*. Furthermore, when administered on a regular basis, self-administered punishments tend to create guilt, depression, decreased self-esteem, and other dysfunctional internal conditions. Generally speaking, an emphasis on self-administered rewards is healthier and more effective.

COGNITIVE STRATEGIES

Cognitive self-leadership strategies focus on the naturally rewarding aspects of work. Cognitive strategies involve defining the job in such a way that the natural (intrinsic) incentives are emphasized. Manz and Sims describe three feelings that are natural reinforcers and that help to promote positive attitudes toward work:

- ***Competence*** (a feeling that one can do the job);
- ***Self-control*** (a feeling of at least some control over what happens on the job); and

- ***Purpose*** (a feeling that one's work is important and meaningful).

Effective self-leaders learn to increase natural incentives through the use of three cognitive strategies: *building natural rewards into the work; focusing their thoughts;* and *establishing constructive thought patterns.*

1. ***Building natural rewards into the work*** involves identifying the elements of tasks that are enjoyable and increasing these elements as much as possible. This can be as simple as choosing a pleasant meeting location or a preferred schedule or as complex as completely redesigning one's job description. The theory is that when choices regarding *how* to accomplish tasks are present, effective self-leaders choose the ways that are most enjoyable for them and, in doing so, significantly increase their feelings of competence, self-control, and purpose.
2. ***Focusing one's thoughts*** on inherent rewards of the work involves concentrating on immediate positive aspects or future rewards that will result from performing the job. Manz and Sims describe this thought focus as a "choose to smell the roses" approach that nourishes one's natural enjoyment and stimulates one's internal motivation.
3. ***Establishing constructive thought patterns*** has a clear impact on job performance. The challenge is to control one's normal thought patterns to increase both personal and professional satisfaction by managing one's beliefs and self-expectations; producing mental images of positive performance; and using positive self-talk to increase one's feelings of competence and confidence.

TEACHING SUPERLEADERSHIP

Collectively, the purpose of superleadership is to increase employees' self-leadership capabilities. However, employees seldom are naturally skilled self-leaders. Therefore, self-leadership behavior must be taught. The task of a superleader is to teach employees self-leadership and to provide them with the opportunity to practice self-leadership in the workplace. Superleaders can accomplish the above through the use of three techniques: *modeling, guided participation*, and *allowing self-leadership skills to develop.*

Modeling

Self-leadership is the essence of superleadership. Thus, superleaders first must become skilled at the behavioral and cognitive aspects of self-leadership. The first step in teaching employees and subordinates self-leadership skills is to act like a self-leader. Superleaders who *model* self-leadership behaviors tend to stimulate those same behaviors in their subordinates.

Guided Participation

Superleaders also can stimulate self-leadership through the use of *guided participation.* This process uses questions that are intended to guide employees through the self-leadership process. For example, to teach goal-setting processes, superleaders may ask questions such as, "When would you like to have this job completed?" or "How many would you like to finish today?" Similarly, self-observation processes can be honed simply by asking the employee how he or she felt about an outcome. Guidance, rather than direct instruction, facilitates the employee's own intrinsic sense of competence, control, and purpose.

Allowing Self-Leadership Skills To Develop

Superleaders create self-leaders by reinforcing employees during the gradual evolution and development of their self-leadership capabilities. Superleaders recognize that self-leadership does not occur overnight. At the beginning, the desired task-related behaviors are rewarded and reinforced. As time goes on, reinforcement shifts toward an emphasis on *process* rather than on *task.* Manz and Sims note that during the final stages, it is particularly important that social reinforcement be given when the self-leadership behavior occurs. "Reinforcement, encouragement, and other forms of support from the Superleader are critical in establishing incentives for initiative and an environment that encourages self-leadership" (Manz & Sims, 1989, p. 56).

REFERENCE

Manz, C.C., & Sims, H.P. (1989). *Superleadership.* New York: Berkley Books.

SYSTEM 4

The work of Rensis Likert (1961, 1967) includes the most complete and sophisticated organizational theory that is based on behavioral science. Likert's theory clearly is prescriptive; he states that his approach describes effective organizations and that, if implemented, will make organizations effective.

One can think of Likert's *System-4* theory as an expansion of McGregor's (1957) Theory-X and Theory-Y into four systems. *System 1* is much like an extreme Theory X-organization: rigid, autocratic, and exploitative of workers. *System 2* represents benevolent autocracy or paternalism. *System 3* is called "consultative" management: workers are involved to a degree in making decisions, but all real power remains with the managers. *System 4* is "participative" management: workers have influence over decisions that affect them.

SYSTEM 4

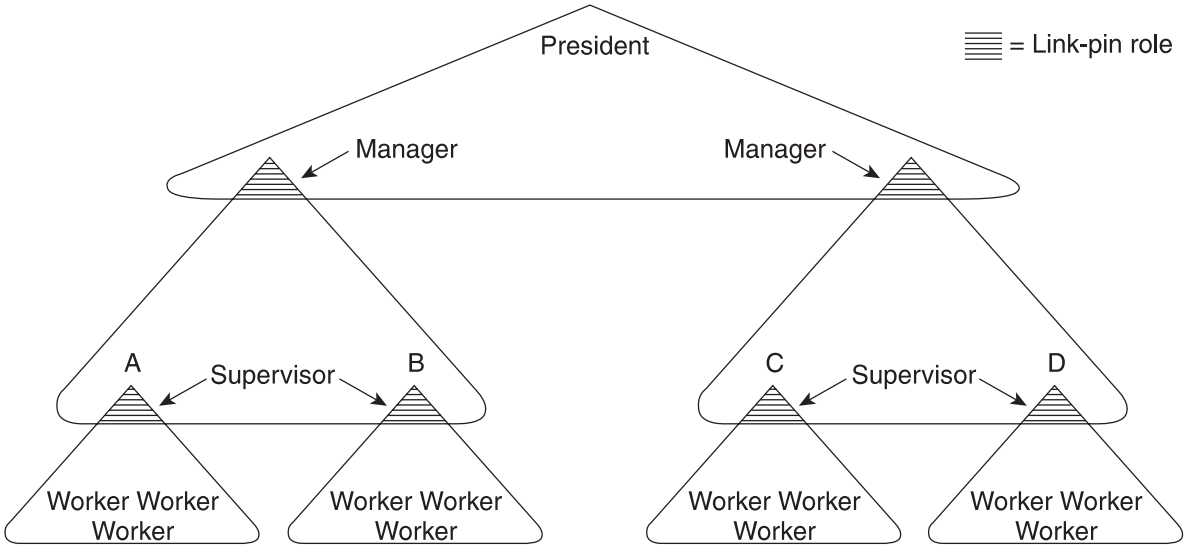
Likert (1967, p. 47) presents System 4 as having three key elements:

- ***The use by the manager of the principle of supportive relationships;***
- ***The use of group decision making and group methods of supervision;*** and
- ***High performance goals for the organization.***

The principle of supportive relationships means that management, procedures, and norms in the organization must function so that each individual, in his or her own frame of reference, will feel supported and valued.

These statements indicate several things. First, supervision is viewed as a group activity, not a one-to-one, superior-to-subordinate process. Second, the group is given as much authority as possible; decisions are group decisions, not orders from above. Third, the supervisor or manager is seen as a "link-pin." That is, the supervisor is the head of one group but is not a member of another group at the next level up. The supervisor or manager's function is to act as a coordinative "linker" (information transmitter) between the two groups. Thus, the supervisor serves as an important communication link between the two levels.

Likert incorporates some earlier organizational theories in System 4. His "principle" of management owes much to the human-relations school but also incorporates Maslow's (1943) esteem and growth needs. Likert's group methods are derived from Mayo (1919, 1933) and reflect Maslow's social-need category. Likert's concept of performance goals as well as his basic structure are derived from Weber's (1947) theory of bureaucracy.



Likert's Overlapping Group/Link-Pin Model

In the organization depicted in the preceding figure, the only modification to the traditional bureaucratic form is that authority is shared at one level *below* that in a basic bureaucratic model. The manager does not make decisions alone; instead, the decision is made by the manager *in collaboration with* his or her subordinates. Likert also proposes a version of Fayol's (1921, 1949) Bridge, which is depicted in the figure that follows. Because coordination has become a more complex issue since Fayol's time, Likert uses an *ad hoc* group for this purpose, selecting relevant people from units that need to coordinate activities in order to accomplish tasks.

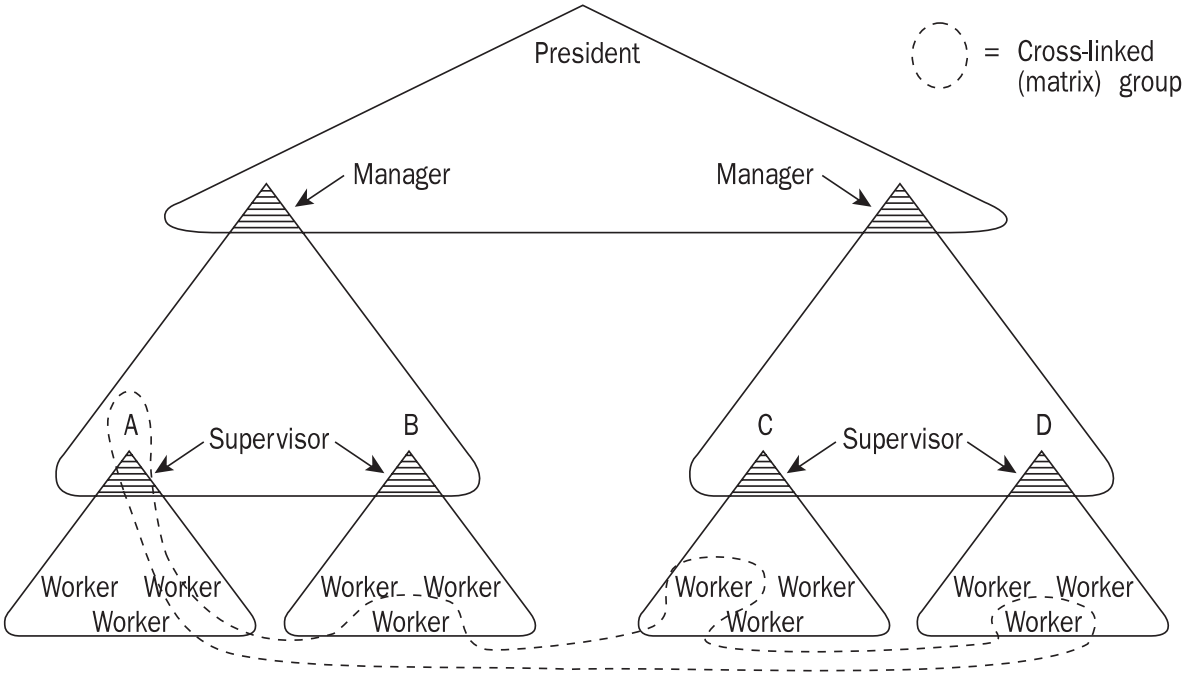
A HISTORICAL PERSPECTIVE

The historical importance of Likert's theory should not be underestimated. It presents a workable organizational form for implementing a basic human-relations approach and for putting McGregor's (1957) Theory-Y into practice.

Likert maintains that most managers can learn to operate under this theory: "Data...show that managers who seek to do so can readily learn better systems of management" (1967, p. 190). He also speaks out for the utility of sound behavioral-science research:

> Most organizations today base their standard operating procedures and practices on classical organizational theories. These theories rely on key assumptions;...until recently, the shifting sands of practitioner judgment were the major if not the only source of knowledge about how to organize and run an enterprise. Now, research on leadership, management, and organization, undertaken by social scientists, provides a more stable body of knowledge.... The art of management can be based on verifiable information derived from rigorous, quantitative research. (1967, p. 1)

However, many believe that the conspicuous absence of Taylor's (1911) theory is a major flaw in Likert's approach. Although Taylor's theory indeed is imperfect, Likert's



Likert's Overlapping Group/Link-Pin Model

reasoning was unusual. He believed that Taylor's basic concept of job technology was irrelevant to organizational effectiveness. At a professional meeting in 1978, Likert was asked why his theory contains no meaningful consideration of the specific characteristics of jobs (design, technology, and so on) or of people's motivations. He replied to the effect that these factors are organizationally irrelevant.

Many organizational theorists disagree strongly with Likert's opinion. Most believe that the technical and social aspects of organizations are interdependent.

REFERENCES

Fayol, H. (1949). *General and industrial management* (C. Storrs, Trans.). London: Pitman.

Fayol, H.L. (1921). *Incapacite industrielle de l'etat: Les P.T.T.* Paris: Dunod.

Likert, R. (1961). *New patterns of management.* New York: McGraw-Hill.

Likert, R. (1967). *The human organization.* New York: McGraw-Hill.

Maslow, A.H. (1943). A theory of human motivation. *Psychological Review, 50,* 370-396.

Mayo, E. (1919). *Democracy and freedom: An essay in social logic.* Melbourne, Australia: Macmillan.

Mayo, E. (1933). *The human problems of an industrial civilization.* Cambridge, MA: Harvard University Press.

McGregor, D.M. (1957). The human side of enterprise. *The Management Review, 46*(11), 26.

Taylor, F.W. (1911). *Scientific management.* New York: Harper.

Weber, M. (1947). *The theory of social and economic organizations* (T. Parsons, Ed.; A.M. Henderson & T. Parsons, Trans.). New York: The Free Press.

SOURCE

Sashkin, M. (1981). An overview of ten management and organizational theorists. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1981 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

TASK ANALYSIS

In the field of training, *task analysis* is part of the process of *training needs assessment.* By itself, task analysis is part of the process of *job analysis* and serves a number of functions in the field of human resource development. Task analysis is helpful in the following organizational processes:

- training design,
- personnel selection and placement,
- work planning,
- performance appraisal,
- employee development, and
- team building.

Job analysis is a process used to obtain information about jobs within organizations. Job-related information can be grouped into four main areas: *work activities; equipment, materials, and work aids; working environment and conditions;* and *personal requirements* (McCormick & Ilgen, 1985).

In task analysis, human work is broken into its component parts or tasks (McCormick, 1983). As such, task analysis remains inseparable from job analysis—so much so that Gael (1983) has defined job analysis as a method of assessing work tasks and the ways in which workers perform specific jobs. Similarly, Rossett (1987) has described task analysis as a means of identifying *observable* job activities.

TYPES OF WORK

When conducting a task analysis, Pareek (1988) has found it helpful to classify work by *jobs, functions, tasks,* and *activities.*

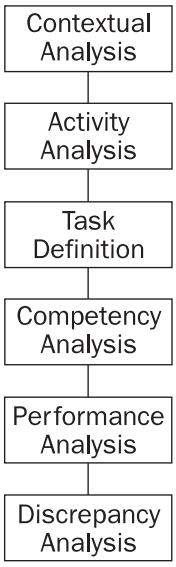
- ***Jobs*** are combinations of work-related functions that are performed by individual employees.
- ***Functions*** are broad subdivisions of jobs. Functions are composed of tasks that are grouped according to the nature of the work involved—for example, supervising, planning, operating, or repairing. Functions can be related to jobs, workers, or organizations.
- ***Tasks*** are groups of activities that contribute substantially to organizational goals. Tasks have identifiable beginnings and endings.

- ***Activities*** are observable, job-related actions or behaviors that usually are performed sequentially. Groups of activities make up tasks and form the foundation of a task analysis.

The purpose of task analysis is to provide a behavioral understanding of a task's requirements. Task analysis focuses on human performance; performance requirements; and the knowledge, skills, and abilities that are needed in order to perform the task. Task analysis usually follows a basic six-step model (Pareek, 1988).

A SIX-STEP MODEL OF TASK ANALYSIS

The six steps of task analysis are contextual analysis, activity analysis, task definition, competency analysis, performance analysis, and discrepancy analysis. (See figure at end of file.)



The Six Steps of Task Analysis

CONTEXTUAL ANALYSIS

Task analysis begins with a *contextual analysis.* A person who is planning a task analysis must develop an understanding of the organization's *mission,* which is the direction or combination of directions in which the organization is moving. A mission can include elements such as a definition of the business that the organization is in; descriptions of the organization's products and services; descriptions of the organization's clientele and of its marketing strategies; and statements of the organization's goals in areas such as profitability, growth, liquidity, values, treatment of employees and customers, and prestige.

The organization's broad goals also must be identified. Goals may or may not be a part of the organization's mission statement. Information may be obtained about this topic by asking employees to state their perceptions of the organization's goals. The employees' statements then can be compared with any existing official goal statements. The process of contextual analysis can be helpful for determining whether the employees are familiar with the organization's formal goals or whether the goals have changed since they were published.

In the last, optional, phase of contextual analysis, the analyst identifies the main tasks that exist within the organization. Again, employees may be asked to identify the tasks that they believe contribute to the achievement of the organization's goals. This process is helpful in clarifying organizational goals and tasks and for increasing employee commitment to the organization's purpose.

ACTIVITY ANALYSIS

The second step of task analysis is *activity analysis.* An activity has three major properties:

- Activities are *observable.* For example, the process of planning is not an activity because planning cannot be observed.
- Activities are *descriptive.* Activities can be described in concrete terms; they do not have to be evaluated or interpreted in order to be described.
- Activities are *objective.* If more than one person observes an activity, each person's description of the activity should be the same. Descriptions of activities are, therefore, highly reliable, because people who read the descriptions probably will interpret them as the observers saw them.

A distinction should be made between *activities* and *subactivities*. An activity is a behavior undertaken to complete a *task*; a subactivity is a behavior undertaken to complete an *activity.* For example, writing a letter is an activity. The subactivities of the activity of writing may be procuring paper and pen and seating oneself with a writing surface.

Sources of Information

Three types of people form the primary sources of information for activity analysis: *job incumbents, role-set members,* and *outside experts.* Job incumbents are the people who perform the activity; role-set members interact with job incumbents as peers, supervisors, colleagues, and so on; and outside experts may include other task analysts, technical experts, educators, organizational management, and specialists in the field.

Job incumbents, role-set members, and outside experts gather data by observing people as they perform the activity and by assessing activities that job incumbents

currently do or should be doing. Several methods can be used to collect information from the three sources. Some of the more common methods are as follows:

- individual and group interviews,
- technical conferences with experienced personnel,
- structured or open-ended questionnaires,
- direct observation,
- diaries,
- critical incidents, and
- organizational records.

After one or more of these information-gathering methods are used, a list of behaviorally based, work-related activities can be created.

TASK DEFINITION

After the activity analysis has been completed, the task analyst must group the activities into tasks. The tasks then must be named. This process requires subjective decision making and is most effective when performed by those who know and understand the job that is being analyzed.

There is no fixed set of rules regarding the number of tasks that should be defined. As a general rule, however, there should not be so few tasks analyzed that one cannot review them and form a clear picture of the job. Likewise, so many tasks should not be analyzed that distinctions among activities become blurred. Tasks should be balanced in terms of the number of activities each incorporates. Tasks that encompass too many activities should be divided into two or more separate tasks. After tasks have been defined, they are rated in order of importance to the job, and the time spent by job incumbents on each task is assessed.

COMPETENCY ANALYSIS

The purpose of *competency analysis* is to identify the background needed to perform a task. Competencies can be divided into five major areas:

- knowledge,
- skills,
- ability,
- experience, and
- orientation.

Knowledge, skills, ability, and experience are fairly self-explanatory, but orientation may require further explanation. A person's values with respect to his or her job comprises his or her orientation. For example, "respect for the patient" may be an important orientation for a nurse. The process of analyzing competencies is required for each task and, again, is most effective when performed by those who know and understand the job.

PERFORMANCE ANALYSIS

The primary purpose of *performance analysis* is to evaluate job incumbents' performance of the tasks for which they are responsible. Task effectiveness can be measured in terms of *outcome* (results) and in terms of *process* (how the job is being performed).

Only a few indicators need be identified for each task: one or two to measure outcome effectiveness and one or two to measure process effectiveness. Indicators should be *specific*, *concrete*, and *measurable*. The development of performance criteria often is a difficult task and is most effective when undertaken by people who are knowledgeable about the job. Again, such a group may include job incumbents, role-set members, and outside experts who gather to brainstorm and to identify performance indicators.

DISCREPANCY ANALYSIS

Discrepancy analysis is the identification of any differences in data that have emerged during the previous five steps. For instance, discrepancies may exist between the activities reported by job incumbents and those reported by the role-set members, between activities reported and observations, between needed competencies and existing competencies, and so on. The gaps often suggest a need for remedial actions such as training, redefinition of roles, additional work planning, delegation, monitoring, or counseling.

It is helpful to check periodically for discrepancies between job descriptions (as reflected in defined tasks) and actual performance. Information about performance may be obtained by one or more of the following methods:

- Job incumbents' records of the time spent on each activity;
- Role-set members' analyses of the importance of various tasks as compared to the time spent on them; and
- Trained observers' accounts of the tasks and activities being performed.

Thus, any discrepancies between desired activities or tasks and actual performance can be noted and acted on.

REFERENCES

Gael, S. (1983). *Job analysis: A guide to assessing work activities.* San Francisco: Jossey-Bass.

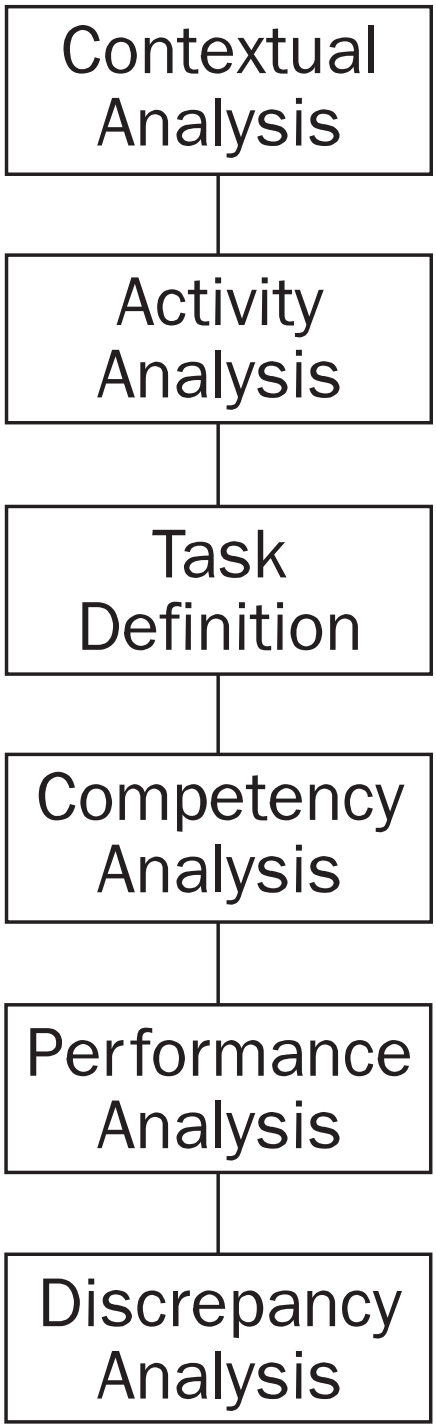
McCormick, E.J. (1983). Job and task analysis. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology.* New York: John Wiley.

McCormick, E.J., & Ilgen, D.R. (1985). *Industrial and organizational psychology* (8th ed.). Englewood Cliffs, NJ: Prentice-Hall.

Rossett, A. (1987). *Training needs assessment.* Englewood Cliffs, NJ: Educational Technology Publications.

SOURCE

Pareek, U. (1988). Task analysis for human resource development. In J.W. Pfeiffer (Ed.), *The 1988 annual: Developing human resources.* San Diego, CA: Pfeiffer & Company.



The Six Steps of Task Analysis

WELLNESS BENEFITS IN THE WORKPLACE

At the beginning of the twentieth century, communicable diseases such as smallpox, cholera, diphtheria, tuberculosis, malaria, and polio were the most common causes of death. Since that time, the medical profession has made remarkable strides in the control of many communicable diseases. Contagious diseases now can be cured or prevented with vaccines, improved public sanitation, and drugs.

Ironically, with cures or preventative measures for most *communicable* diseases, most people now live long enough to succumb to noncommunicable, "lifestyle" illnesses. (Since 1900, the average life expectancy in the United States for men has risen approximately twenty-five years; for women, thirty years.) Today, the four leading causes of death are:[4]

- ***heart disease;***
- ***cancer;***
- ***stroke;*** and
- ***non-motor-vehicle accidents.***

Unfortunately, the traditional medical arsenal of vaccines and pills is proving ineffective against these noncommunicable ailments, nor is there much hope that medical science will develop miracle cures for these killers any time soon. However, research suggests that cancer, heart disease, and the like are—at least to some extent—preventable. Eating a healthful diet, exercising, avoiding drugs and tobacco, adopting a positive and relaxed mental attitude, and improving other factors in one's lifestyle appear to reduce the risks of these causes of death.

This even may be true in the case of AIDS. At this time, *prevention* through lifestyle changes (safer sex, less promiscuity, and cessation of needle sharing by intravenous drug users) is the only way to guard against AIDS.

More and more, it appears that in order to live longer and to maintain their health, people must avoid lifestyles that contribute to accidental fatalities and to ailments such as heart disease and cancer. However, medical science still is committed to searching for miracle cures rather than to advocating beneficial lifestyle interventions. People need to learn not to rely on the traditional medical model to solve their health problems. Under the traditional model, people take little or no personal responsibility for their health; they cede that duty to experts in the medical community. Further, under this model, physicians and patients basically ignore one another, with a few exceptions: when a medical examination is required by a school, insurance company, or employer; when

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[4] Source: United States Bureau of the Census (1988), *Statistical Abstract of the United States.*

public-health officials or schools persuade or require people to obtain vaccinations; or, most frequently, when the person is sick.

Thus, most traditional medical interventions are designed to cope with the effects of preexisting illness or injury, not to promote good health. This is a *sickness model* of health care. Yet, paradoxically, the lifestyle illnesses and catastrophic accidents to which many people will succumb are beyond cure by the time that they have been diagnosed. Early detection or complete prevention of those diseases with the help of lifestyle changes are critical for success in dealing with heart disease and cancer. Similarly, safety programs, in the context of comprehensive wellness efforts, can help to decrease the number of accidental fatalities. We need to change from the traditional sickness model to a more progressive *wellness model,* in which the medical community works in partnership with people and organizations to promote health.

ORGANIZATIONS AS PROMOTERS OF WELLNESS

Michael P. O'Donnell, a hospital administrator in the field of health promotion, and Thomas Ainsworth, a physician and health-care consultant, believe that employers have both a self-interest and an opportunity to improve public health by embracing the wellness model. O'Donnell and Ainsworth (1984) advocate that organizations replace their traditional health-care benefits with *wellness-in-the-workplace* programs.

The Costs of Traditional Health Care

As of 1987, health-care costs constituted 11.1 percent of the United States' gross national product. That year, employers paid for most of America's $70.3 billion group-health-insurance bill. Unless a national system of health insurance relieves them of this burden, employers will continue to shoulder this large portion of the annual $500.3 billion national health-care bill.[5] Most employees consider health benefits to be a very important part of their compensation packages, and some unions have gone on strike because of threatened cuts in health benefits.

Health-insurance costs do not disappear when employers implement wellness-in-the-workplace programs. Health insurance usually is part of any comprehensive wellness program. Still, there are good reasons to believe that when wellness programs replace traditional health-care benefits, the employer's investment is made both more wisely from the public-health viewpoint and more cost effectively from the employer's perspective.

Wellness Programs: Good for Organizational Health

An Aid to Society

Because wellness-in-the-workplace programs are wise investments in public health, they offer organizations an opportunity to practice good corporate citizenship. Jobs are a

[5] Source: Health Insurance Association of America, *Source Book of Health Insurance Data*, 1989.

major part of people's lives during the very years when their lifestyles may be sowing the seeds of long-term future disease; therefore, organizations are in an ideal position to influence employees' health in a positive way. If organizations transform sickness benefits into wellness benefits, they can help to educate people about wellness and health, and this knowledge then can be passed on to others. In effect, organizations that adopt wellness programs positively affect the entire society's attitude toward healthful lifestyles by communicating key concepts to their employees.

Cost Effectiveness

The traditional health-insurance benefits offered by most organizations teach people to cope with sickness; one visits the doctor and makes a claim against one's employer's policy when one is sick. In contrast, a wellness program teaches and encourages the *prevention* of disease. Wellness programs are more cost-effective than traditional health-care programs. The reason is simple: the costs of health insurance are directly and indirectly related to the number and dollar amount of claims submitted to the insurance company by the organization. A safety-conscious and healthy work force should be less expensive to insure than an accident-prone and frequently sick work force.

DESIGNING A WELLNESS PROGRAM

O'Donnell and Ainsworth (1984) recommend an "open-systems approach" to the design of organizational wellness programs. The designers should view the program as an evolving system whose characteristics will be influenced by interdependent *program factors, people factors,* and *organizational factors.*

Program Factors

The *program factors* that should be included are:

- ***Needs assessment;***
- ***Goal specification;***
- ***Comparison of merits of potential locales for the physical plant;***
- ***Determination of the duration and follow-up of the program;***
- ***Choice of a standard of participation (voluntary or mandatory);***
- ***Training and qualifications of program facilitators;*** and
- ***Design of program-evaluation procedures.***

People Factors

It is imperative that employees be involved in the design of a wellness program; once implemented, its success will be determined largely by the level and spirit of employee

participation. (A basic principle of organizational dynamics states that people support ideas and programs that they help to create.) Specifically, the *people factors* should include:

- ***Choices of participation incentives;***
- ***Level and nature of participation of dependent family members;***
- ***Efforts to encourage employees to take responsibility for their own wellness without "blaming the victim";***
- ***Lifetime durability of program concepts;*** and
- ***Effects of the program on teamwork, cooperation, organizational climate, and performance.***

Organizational Factors

The following *organizational factors* should be considered:

- ***Consistency with and appropriateness to the organization's culture;***
- ***Whether to provide paid time for program activities;***
- ***Locale of the program (on or off the organization's premises);***
- ***Whether to purchase an outside provider's program, to tailor such a program to internal specifications, or to develop a program in-house;***
- ***Identification of psychological impediments to the program;***
- ***Labor-management relations/legal/ethical concerns;***
- ***Relationship of the program to employee-assistance, training and other human-resource programs;*** and
- ***How costs of the program will be defrayed—by the organization, by employees, or by a combination of both.***

What To Include in a Wellness Program

Each organization probably should choose the elements of its wellness program on the basis of an open-systems design process. Organizations may wish to consider the following elements for possible inclusion:

- ***Health-risk assessment;***
- ***Health insurance;***
- ***Medical examinations;***
- ***Smoking-cessation programs;***
- ***Safety programs, including safety both on and off the job;***

- ***Exercise programs and facilities;***
- ***Substance-abuse and employee-assistance programs;*** and
- ***Stress-management and mental-health programs.***

COST-BENEFIT ANALYSIS

How the Organization Benefits

O'Donnell and Ainsworth admit that the economic benefits of wellness programs are difficult to quantify. However, it is easy to enumerate the types of program payoffs from which an organization might benefit. These include:

- ***Enhanced employee performance.*** Healthy employees are less likely to be absent because of illness, a benefit that can save an organization a great deal of money. Meanwhile, the employer's demonstrated concern for employees' well-being is a morale booster for current employees and is attractive to prospective employees. Health problems are stresses that interfere with productivity; wellness programs help in avoiding that potential drain. Decreased absenteeism and decreased attrition rates also mean that the organization's base of skills and knowledge will be built more quickly and will last for a longer period of time.
- ***Reduced expenditures for benefits.*** To the extent that they are connected with claims experience, the costs of health insurance, life insurance, and worker's compensation are reduced by wellness programs. Further, the costs of wellness programs are tax deductible for the employer and are untaxed benefits for the employees.
- ***Diminished human-resource-development expenditures.*** Employee turnover is expensive. Decreased attrition means decreased recruitment and training-and-development costs.
- ***Public-image payoffs.*** The organization's commitment to its employees' health may lead to favorable publicity. In addition, the wellness program might have advantageous tie-ins with the organization's products and services.

The Costs

Some of the potential costs of a wellness program include:

- ***Direct program costs.*** Any material resources, personnel, and facilities dedicated to the wellness program will involve direct costs.
- ***Psychological costs.*** A wellness program is designed to improve organizational attitudes and performance, but there is no guarantee that it will succeed. Failure or cancellation of the program because of budget cutbacks might damage the organization's climate and employee morale.

- ***Disruption of the work routine.*** Participation in a wellness program will demand employees' time and energy, which potentially could diminish any gains in productivity.
- ***Lost-opportunity costs.*** Any capital or other resources invested in the wellness program will be unavailable for other investment purposes.
- ***Commitment costs.*** If the wellness program is discontinued, any physical facilities designated for use in the program may need to be converted for other uses. This conversion might involve considerable costs.

The Payback

O'Donnell and Ainsworth provide estimates and a theoretical model that indicates that an organization could recoup its investment in a wellness program and ultimately could profit from it. How soon and how much the investment would pay off would be determined by factors such as the organization's size, the level of employee enthusiasm and participation, and the fixed and variable costs of program administration.

REFERENCE

O'Donnell, M.P., & Ainsworth, T. (Eds.). (1984). *Health promotion in the workplace.* New York: John Wiley.

WORK-REDESIGN MODEL

Hackman and Oldham (1980) suggest that much of the so-called "unmotivation" and lack of caring on employees' part is caused not by poor training or lack of qualifications on the employees' part but by poor job design and poor matching of jobs to employees.

Hackman and Oldham present three key conditions that must be present in order for employees to be internally motivated to do their jobs well:

1. The employees must have *knowledge of the results* of the job. In other words, the employees must receive feedback on their performance.
2. The employees must *experience responsibility* for their jobs; they must feel accountable for the work they produce (its quality, timeliness, and so on).
3. The employees must *believe their work to be meaningful.* The results they produce must have meaning and value to them when judged by their personal value systems. This condition is crucial: no matter how much feedback is given or how much responsibility an employee has, motivation is difficult to inspire if the work to be done seems trivial.

Hackman and Oldham also identify the three job characteristics that contribute to the perception that a job is meaningful:

1. ***Skill Variety:*** displayed by jobs that make use of an employee's various skills and interests.
2. ***Task Identity:*** possessed by jobs that require an employee to "see something through." The employee follows the project from beginning to end.
3. ***Task Significance:*** the effect that the job (whether it is performed well or poorly) could have on others. For example, an automobile assembly-line worker who fails to check each car's brakes properly could be endangering many lives. Such workers may be more motivated by the importance of their tasks to do a good job.

Two other characteristics tend to produce feelings of responsibility in employees: *autonomy* and *feedback.* Employees' feelings of *autonomy* contribute to their sense of responsibility toward the work. If employees function autonomously, i.e., with a large degree of freedom and independence, those employees are likely to feel more responsible for their work and, thus, more motivated to do good jobs.

The ability to know the results of one's work is dictated solely by the amount of *feedback* received. To be most effective, feedback must be *immediate* and *focused.* Ideally, supervisors should review the work of their employees and immediately give the employees feedback as to the acceptability and quality of the work. However, feedback must *not* take the form of a personal affront or compliment. Rather, it must be an

objective view of the work itself. For example, "Jerry, this report does not provide a complete and accurate summary of the meeting's events. Please go back and try to be more specific," is objective and nonaccusatory feedback. In contrast, "Jerry, I'm sick and tired of your wishy-washy reports! Will you *ever* figure out how to do it right?" is more likely to provoke defensiveness and hostility on Jerry's part because it is a *personal* criticism.

Hackman and Oldham present a formula for calculating the "motivation potential" of a job in the form of a *motivation potential score* (MPS). The score is calculated as follows:

$$\text{Motivating potential score (MPS)} = \left[\frac{\text{Skill variety} + \text{Task identity} + \text{Task significance}}{3}\right] \times \text{Autonomy} \times \text{Job feedback}^{*}$$

This formula can be applied after administration of the Job Diagnostic Survey (NTIS Report No. AD779828), which is available from the National Technical Information Service, U.S. Dept. of Commerce, 5285 Port Royal Road, Springfield, VA 22161. The survey, which was written by Hackman and Oldham, is not copyrighted.

The figure on the following page depicts the complete theory of job characteristics and motivation.

Hackman and Oldham also developed a model that lists the factors that must be possessed by a work group in order to operate effectively. This model is a five-step process.

Step One: Assessing Feasibility. The organization must ask itself whether autonomous work groups are feasible within the organizational culture, considering the people who would be in those groups. At the same time, the organizational systems must be "open" to such changes, and any constraints in affecting these changes must be able to be overcome.

Step Two: Designing the Group. Considering the criteria of effectiveness (effort, knowledge and skill, and performance strategies), which ones already are present, and which ones would need to be developed? Is the group an appropriate size, with operational norms and the types of people that would foster motivation?

Step Three: Forming the Group. This step will take time and effort on the part of the group members and, possibly, will require an outside team-building consultant to bring to the group a sense of "teamness." As the group begins to feel more cohesive, it will require less and less outside assistance. At first, though, a facilitator who is skilled in the use of team-building activities can be very helpful.

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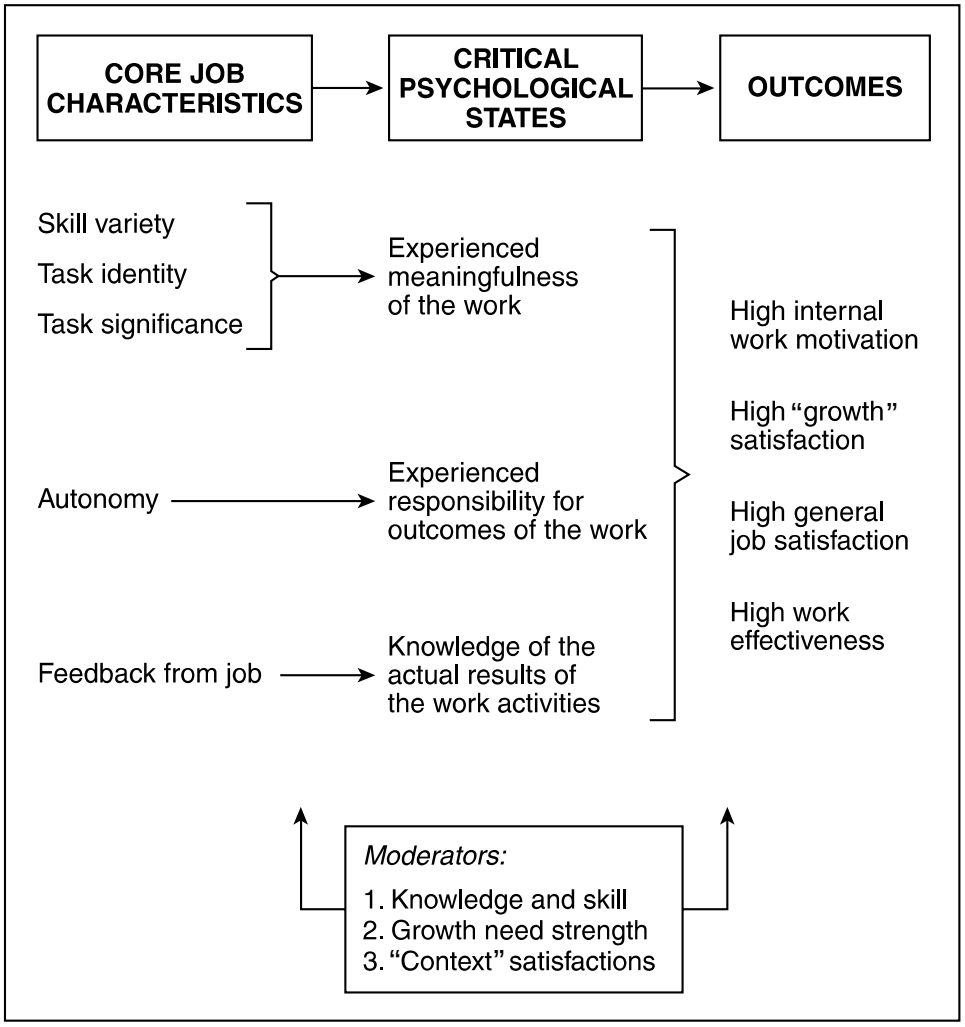

The Complete Job Characteristics Model[*]

Step Four: Providing a Supportive Organization. To successfully build such a group, access to consultants, time to engage in team-building sessions, and general support from the organizational community must be present. The group's goals, methods, and norms must be spelled out clearly and agreed on in order for the new team to function independently. The climate, too, must be such that this work will *improve* the work group; team building is no substitute for poor job designs, boring work, and mismatched employees and jobs.

Step Five: Ensuring Quality of Intercommunication. Interactions among group members must be effective, nonpejorative, and with a sense of working toward a common goal. Every group member must be given equal input and receive equal treatment in order for the team to function effectively. Good communication skills are of the utmost importance.

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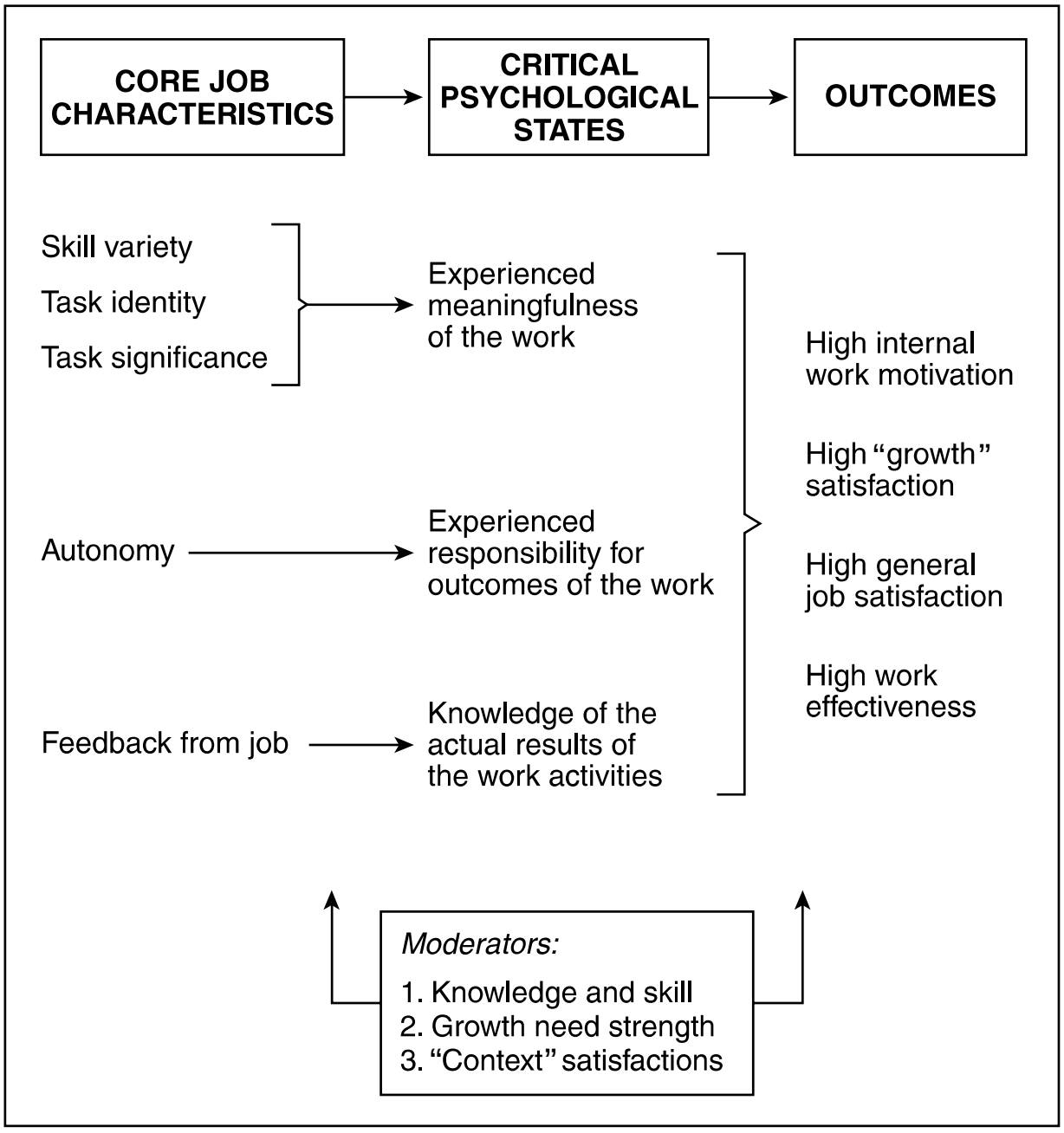
REFERENCE

Hackman, J.R., & Oldham, G.R. (1980). *Work redesign.* Reading, MA: Addison-Wesley.



The Complete Job Characteristics Model

AQUARIAN CHANGE

In the *Aquarian Conspiracy*, Marilyn Ferguson (1980) advanced the theory that we are in the midst of a peaceful revolution of consciousness that will renew society. The participants in this revolution are, in one sense, conspirators; they are the millions of individuals in virtually all walks of life and all nations who tacitly conspire for constructive change in human society. Ferguson is an active commentator on brain and consciousness research, and the conspiracy she posits has as much to do with cognition—the way that minds organize external inputs and internal thoughts—as it does with consequent behavior. Central to Ferguson's thesis is the notion of the *paradigm shift*—a new way of thinking about things.

FOUR TYPES OF CHANGE

Ferguson tells us that *paradigm change* is only one of four principal varieties of change. However, paradigm change is a more advanced order of change than the other three. In brief, Ferguson's four varieties of change are as follows.

- ***Change by exception:*** Exceptions to the rule are classified outside the rule.
- ***Incremental change:*** Change is gradual, so the person is not aware of it.
- ***Pendulum change:*** An extreme point of view is exchanged for its opposite.
- ***Paradigm change:*** New information is integrated, and the "picture" shifts or is enlarged.

Change by Exception

Regardless of how strongly we may hold certain beliefs, from time to time we are confronted with irrefutable contradictions of those beliefs. A fairly common means to deal with the contradictions is to recognize the new information as an exception. For instance, when we meet individuals who do not fulfill our gender, racial, or ethnic stereotypes, we often decide that they are exceptional members of their groups. For another example, a business person might believe that a free-market economy is superior to a regulated economy, yet desire protective tariffs for the products made by his or her own industry. In cognitive situations such as the preceding, instead of questioning our underlying beliefs, we often decide that we have discovered an exception to the rules.

In his book, *The Nature of Prejudice*, psychologist Gordon Allport (1954) labels the phenomenon of change by exception as "refencing." Metaphorically, we see one sheep in the flock that is different from the rest and, rather than change our perception of the

characteristics of sheep, we mentally remove that one sheep from the flock and reconstruct the fence around the remainder of the flock.

Ferguson describes this form of change as "...the easiest and most limited..." (p. 71). It allows us to retain our old beliefs while identifying anomalies.

Incremental Change

Change sometimes creeps up on us imperceptibly. Small changes gradually alter our belief systems, although we may be unaware of how or why our attitudes have changed.

The evolution of mainstream American attitudes toward the war in Vietnam provides an example of incremental change. During the late 1960s and early 1970s, some Americans believed passionately that the involvement of the U.S. was morally wrong. Some other Americans believed with equal fervor that fighting the war in Southeast Asia was a moral imperative. Those who either opposed or endorsed the war on moral grounds probably never represented a majority of the population. However, the vast majority of Americans started out nominally supportive of the war and on pragmatic grounds *incrementally* became convinced that waging the war was a mistaken or self-defeating policy. At some point, a majority of Americans changed their minds about the policy, but probably few could point to the precise day when the change occurred for them. For most Americans, the change in beliefs took place gradually; for many Americans, the basic premises and conclusions that earlier led to support for the war had not been rethought.

Pendulum Change

Attitude change sometimes occurs more precipitously. Ferguson writes, "The hawk becomes a dove, the disenchanted religious zealot becomes an atheist, the promiscuous person turns into a prude—and vice versa" (p. 72). Unfortunately, the pendulum change is not tempered by the positive attributes of the former point of view. Worse yet, as Eric Hoffer (1966) points out in *The True Believer,* few hold to their beliefs more zealously than do the newly converted. Pendulum change repudiates the past and substitutes a belief of the opposite extreme. Ferguson calls this a movement from "...one kind of half-knowing to another" (p. 72).

Paradigm Change

A *paradigm* is a cognitive model of how things are or a standard for how things should be. Paradigm change occurs when premises and conclusions are rethought thoroughly, so that discordant information is not excluded from the model (unlike change by exception). Furthermore, a fundamental rethinking differs from the gradual accretion of new information that occurs in incremental change and from the reversal of beliefs that occurs in pendulum change. Paradigm change introduces a new problem model that integrates the discordant beliefs. In a way, paradigm change represents the synthesis of

thesis and antithesis. From what seemed to be irreconcilably conflicting beliefs, a new view emerges.

IMPLICATION FOR ORGANIZATION DEVELOPMENT

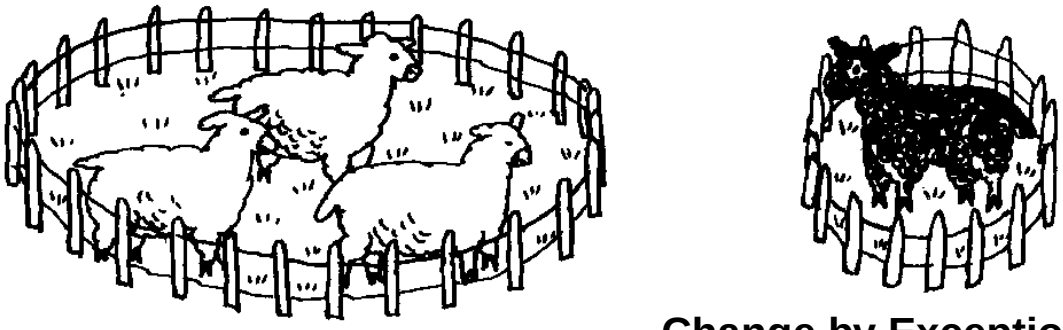
One of the most important observations of Ferguson's analysis is that change by exception, incremental change, and pendulum change all fall short of transformation. Yet change—particularly planned change—is the basis of organization development. Human resource managers who wish to transform their organizations need to remain aware of the different varieties of change. It may be that the goals of a change intervention are adequately served by some level of alteration below transformation. However, for transformation—organizational renewal—to occur, the beliefs that control behaviors must undergo a more profound paradigm change.

REFERENCES

Allport, G.W. (1954). *The nature of prejudice.* Cambridge, MA: Addison-Wesley.

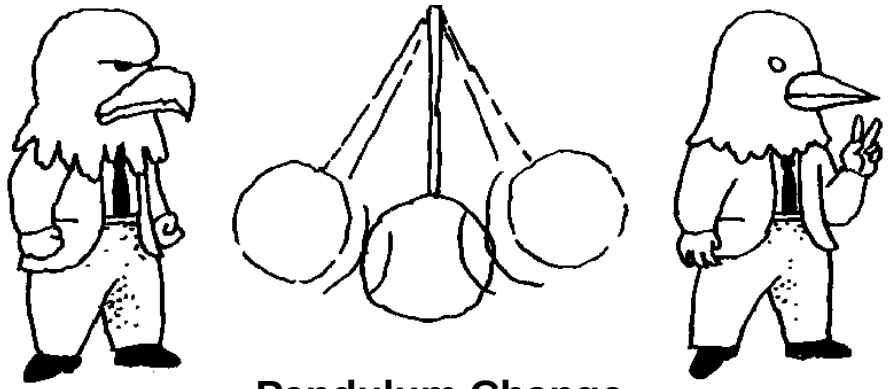
Ferguson, M. (1980). *The aquarian conspiracy: Personal and social transformation in the 1980s.* Los Angeles: J.P. Tarcher.

Hoffer, E. (1966). *The true believer: Thought on the nature of mass movements.* New York: Harrow.



Change by Exception

Incremental Change



Pendulum Change

Paradigm Change

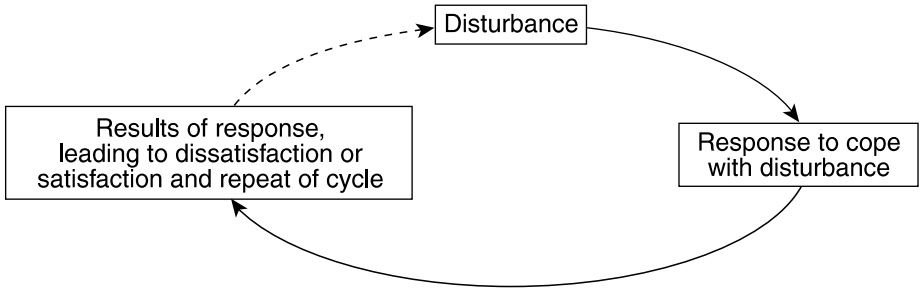
FUNCTIONAL ROLES OF CHANGE AGENTS

The Greek philosopher Heraclitus said, “There is nothing permanent except change.” Change is an even greater reality in contemporary life; it is occurring at an accelerated pace, and the human nervous system has difficulty accepting the rate of change that exists in Western culture (Toffler, 1970).

Given the impact of technology on the modern world, there is almost no likelihood of slowing the pace of change. The challenge for today’s managers is to learn to manage change. According to Odiorne (1981), “There is no way we can learn to adapt to change without learning how to manage it” (p. x). This implies a need for management by anticipation, in contrast to unplanned, unmanaged, chaotic change.

CHANGE BY SIMPLE REFLEX

Much change in an organizational system occurs as a response to disturbances from within or outside the organization. Havelock (1973) calls the most simple response to a disturbance “change by simple reflex,” for it is “problem-solving” of the reflexive, trial-and-error variety (see figure). An internal or external stimulus leads to a response. In a teachers’ strike, the school board fires the teachers or gives in to their demands; if a pastor criticizes the moral conduct of the church’s leading elders, the elders demand the pastor’s resignation. Such an approach to problem solving often produces chaotic change because it is unplanned and unmanaged.



Change by Simple Reflex

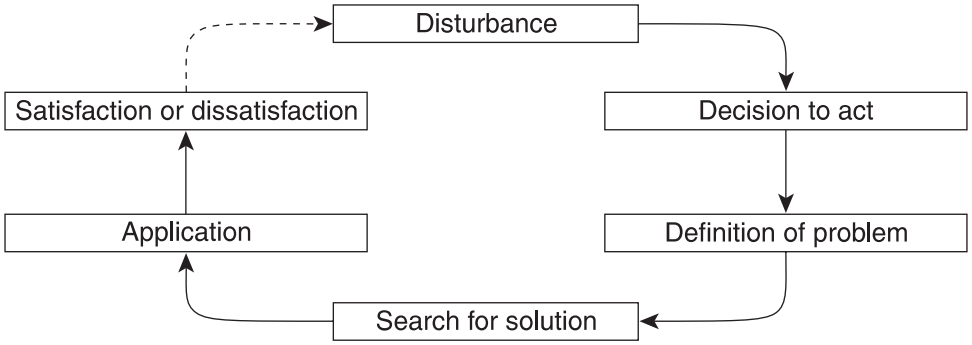
CHANGE BY RATIONAL PROBLEM SOLVING

An initial organizational disturbance also is the impetus in planned, rational problem solving, but the response is divided into five steps:

1. Feeling a need and deciding to do something about it;
2. Actively attempting to define the problem;
3. Searching for promising solutions;

4. Applying one or more promising solutions to the need;
5. Determining whether the problem is solved satisfactorily; repeating the problem-solving cycle if it is not.

This problem-solving cycle can be illustrated as follows.



Change by Rational Problem Solving

THE ROLES OF THE CHANGE AGENT

The process of change may be implemented by top administrators, staff members, or outside consultants or agents. No matter who a change agent is, there are five primary modes through which he or she can relate to the change process:

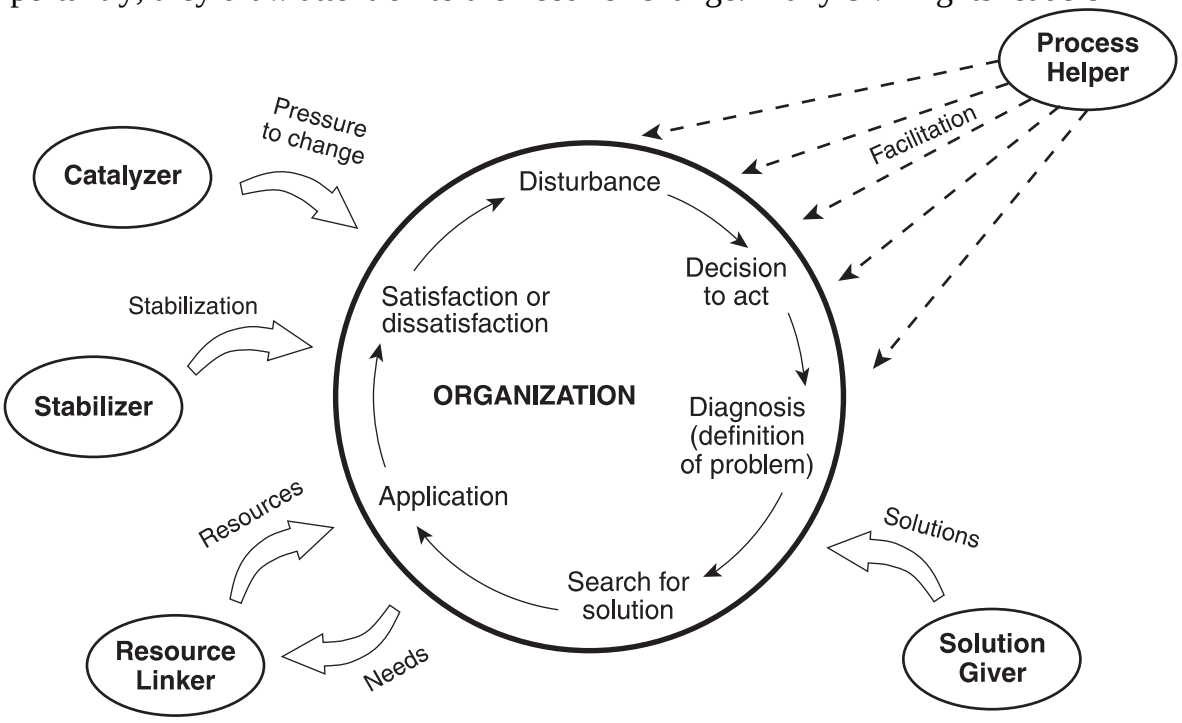
1. As a catalyzer,
2. As a process helper,
3. As a solution giver,
4. As a resource linker, and
5. As a stabilizer.

These five primary modes provide functional roles for facilitating organizational change (see the figure on the next page). When the five change-agent roles also are functionally related to the problem-solving process, the result is a dynamic process for effectively accomplishing change within an organization.

The Change Agent As Catalyzer

It is not unusual for people to resist change and to want to keep things as they are. Odiorne (1981) declares, “The best minds of our society often seem bent upon criticism and resistance rather than creation and innovation.” (p. ix). For this reason, change agents are needed to overcome inertia, to prod organizations to be less complacent, and to activate initial work on serious problems.

Change agents, whether from inside or outside the organization, are dissatisfied with the status quo. By challenging the usual way of doing things, these catalytic protagonists energize an organization to come to terms with its problems. Most importantly, they draw attention to the need for change. Many civil rights leaders in



Five Roles of Change Agents

the 1960s used social protest as a means to draw attention to the need for change in policies regarding people of color. A research-based person might use statistics to point out a need for change. Another might encourage change by example (e.g., using a computer to perform a task that previously had been done solely by an individual).

The Change Agent As Process Helper

A critical, yet often neglected, functional role is that of helper in the processes of problem solving and innovation. The process helper is knowledgeable in how to facilitate change in individuals and organizations. Because organizations often lack this expertise, the process helper can contribute a valuable service by showing the organization how to:

- Recognize and define needs;
- Analyze problems and set goals;
- Obtain needed resources;
- Generate a range of solutions, adapt them to organizational problems, and install the solutions; and

- Evaluate the solutions to determine whether they are meeting organizational needs.

These facilitative steps were developed by Havelock (1973).

Process helpers utilize problem-solving skills in order to facilitate change. For example, the existing leaders of a local lodge were concerned that not enough people were available to fill leadership positions. As they analyzed the problem, they discovered that they had experienced a steady decline in membership because of changes in the community. The leadership structure called for by the lodge's constitution was appropriate for a much larger membership. The leaders changed the lodge's constitution to fit a smaller membership; they then had enough people to meet their leadership needs.

The Change Agent As Solution Giver

Many change agents have definite ideas about what changes should occur. Being an effective solution giver, however, entails more than generating a solution. It also involves a sense of timing and effective communication to create awareness of the solution's value and to gain its ultimate acceptance.

The change agent as solution giver must know enough about the proposed solution to be able to assist the organization in adapting it to its requirements. For example, a county agent's office was concerned about its future because the county had become increasingly urban, and farming in the area had declined. The county agent had heard about a "family strengths" program sponsored by the Cooperative Extension Service of the U.S. Department of Agriculture. The agent thought that this program could be important in helping people in the county to adjust to present and future changes. Because she knew that others might not agree, she began to talk about the program and to share informative literature with her colleagues. Gradually, others became interested in the program, and it eventually was adopted.

The Change Agent As Resource Linker

Effective problem solving requires the interlinking of needs to resources. Resources may be of many kinds: money or means to money; special knowledge; skill in analyzing problems; knowledge of solutions; the ability to formulate, adapt, and adopt solutions; or expertise in the process of change. People are a major resource for time, energy, motivation, skills, and other expertise. The change agent as resource linker often is undervalued in organizations. However, the person who is able to bring people together and who helps the organization to discover and make optimum use of the resources inside and outside the organization plays a very special role in facilitating effective change.

For example, a dean was concerned that many of her faculty members were not having articles published in journals. When she talked to members of the faculty, she learned that many of them did not know where or how to submit articles for publication.

She also discovered that one member of the faculty had a strong publishing record and knowledge about a number of pertinent journals. The dean recruited this professor to be a resource linker, to help other faculty members to contact journals and to assist with the preparation of articles to meet publication requirements.

The change-agent roles discussed so far are based on the work of Havelock (1973). However, for the change process to be defined completely, one last change-agent role should be introduced.

The Change Agent As Stabilizer

Because of the emphasis on promoting change and reducing resistance to change, less attention has been paid to the organization's need for stability, especially after a successful change process. Broskowski, Mermis, and Khajavi (1975) indicate that a more complete recognition is needed of the dynamic interplay between change and stability for successful growth to occur. When change has been effected, a new set of behaviors or mechanisms is required to stabilize that change. This is the function of the stabilizer, who can show the organization how to:

- Build and maintain organizational boundaries;
- Build interdependence and cohesiveness on all sides of the organizational change;
- Provide a stable and continual link with other organizations in its social environment;
- Avoid growing so fast that it discards elements that are fundamental to its identity and purpose.

For example, in a small business in which several significant, new products have just been developed and marketed, even if management perceives the opportunity for another "top-of-the-line" product to be developed, it should ask whether the company could develop another new product quickly and still maintain quality. Before launching another product, the managers might decide to wait until quality control has been stabilized on the most recently developed products and until it seems that the recent innovations are successful.

DEFINING ONE'S ROLE

Persons with various job titles inside or outside an organization may discover that they can perform one or more of the five functional roles for facilitating organizational change. In defining one's own role, one should take the following points into consideration.

1. The five roles of change agents are not mutually exclusive. A change agent may be a catalyzer, process helper, solution giver, resource linker, and stabilizer all at

the same time. Knowing how to be effective in one functional role can help a person to understand the others.

2. A person from inside or outside the organization can be an effective change agent. Sometimes "outsiders" see organizational dynamics more objectively, and they usually have more liberty to work in various ways with different individuals in the organization. However, "insiders" usually are more knowledgeable about the organization and identify more with its problems. An insider also is known to the members of the organization and, thus, often is perceived as being more trustworthy than an outsider.
3. A change agent can be "line" or "staff." A person in a formal position of authority, such as a president or executive director, usually is most able to foster innovation in a system. The top administrator sets the tone, opens the doors, and supplies the psychological and material support, even when he or she is not the formal change agent. The more an administrator or manager knows about the change process, the better. On the other hand, a staff person may actually perform the functional role of facilitating the change. A staff person often is perceived as less threatening than an administrator and, therefore, may be able to intervene more directly.
4. A competent change agent can work from above or below. It is much more difficult to bring about change from below when one does not have formal power, but it can be accomplished. One must understand the processes of problem solving and change; the points of leverage within the organization; the most effective and efficient channels for clear, persuasive communication; and the best time, places, and circumstances for executing change (Havelock, 1973).
5. An effective change agent establishes clear expectations. This is especially true when the change agent is operating in a consultant-client relationship. It is important that agreement be reached concerning what roles the consultant is expected to play, in order to *clarify the expectations* of both parties and to facilitate clear communication and productive change. An agreement about expectations may be open ended so that new roles can be discussed as conditions change.

CONCLUSION

Effectively managed change is important to the well-being of both individual and organizational systems. Change is most likely to be beneficial when it is based on a rational process of problem solving. The change agent relates to this process in five functional ways, and all five are needed to bring about satisfactory solutions to organizational disturbances.

REFERENCES

Broskowski, A., Mermis, W. L., Jr., & Khajavi, F. (1975). Managing the dynamics of change and stability. In J. E. Jones & J. W. Pfeiffer (Eds.), *The 1975 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

Havelock, R. G. (1973). *The change agent's guide to innovation in education.* Englewood Cliffs, NJ: Educational Technology Publications.

Odiorne, G.S. (1981). *The change resisters.* Englewood Cliffs, NJ: Prentice-Hall.

Toffler, A. (1970). *Future shock.* New York: Random House.

SOURCE

Chartier, M.R. (1985). Functional roles for facilitating organizational change. In L.D. Goodstein & J.W. Pfeiffer (Eds.), *The 1985 annual: Developing human resources.* San Diego, CA: Pfeiffer & Company.

Five Roles of Change Agents

MODELS FOR DESIGNING AND IMPLEMENTING CHANGE

According to Gerard Egan (1988a, 1988b, 1989) many books and models that describe excellence in companies and institutions do not tell how to incorporate excellence into the system. That is, they deal with principles rather than with the *pragmatics* of excellence. Although there are many models for dealing with organizational change, there are comparatively few that deal with systems design and assessment (Nadler & Tushman, 1977). Some design and assessment frameworks are too complex, whereas others are not complex enough. Some focus almost exclusively on organizational structure and say little about business dimensions such as mission, strategy, operations, and management.

Egan (1988a) introduced what he calls "*Model A*" for assessing and designing excellence into a system and "*Model B*" (1988b) for the management of corporate and institutional change. Model A is a comprehensive, yet not overly complex template that presents strategic, operational, organizational, managerial, and leadership dimensions in a logical, all-purpose framework that is useful for the design and assessment of excellence. Model B builds on the assessment and design capabilities of Model A and presents a template for the management of corporate and institutional change.

MODEL A

Egan differentiates between business and organization. *Business dimensions* have an *outward* focus and emphasize areas such as mission, markets, customers, systems in the external environment, and so forth. *Organizational dimensions* focus *inward* on areas such as organizational structures, human resources, and the organizational processes used to engage in business. Egan believes that without a framework to systematically assess and design excellence into organizational systems, the management of innovation and change are extremely difficult.

Model A takes a "no-formula" approach in that each of its four areas suggests *principles of effectiveness* rather than a step-by-step "laundry list." Each organization must take these principles and tailor them to its own situation. Model A's four basic areas are: (a) business dimensions, (b) organizational dimensions, (c) management and leadership, and (d) managing the "shadow" side of the organization. Each area contains a number of components.

Business Dimensions

The business dimensions of Model A focus on the exploration and establishment of markets and the delivery of quality products or services to clients or customers. There are both operational and strategic business dimensions.

Strategic Business Elements

Strategic business elements provide purpose and direction to the organization. They include the following:

- ***Markets, Customers, and Clients.*** Markets need to be identified, and customer needs and wants within these markets need to be explored.
- ***Business Environment.*** Competition, economic and social trends, new markets, emerging technology, relevant government regulations, and so forth should be scanned periodically for both threats and opportunities.
- ***Mission.*** A business mission or reason to exist should be developed, together with a parallel *people* mission.
- ***Business Philosophy.*** An integrated set of values and policies needs to be formulated to govern the conduct of business.
- ***Major Business Categories.*** The major categories of products or services to be delivered to customers need to be determined.
- ***Basic Financing.*** The system needs to be established on a firm financial foundation.
- ***Strategic Plan.*** All these elements need to be addressed and pulled together into a strategic plan that establishes the long-term direction and goals of the system.

Operational Business Elements

Operational business elements are part of the day-to-day business of the organization and include the following:

- ***Products and Services.*** High-quality products and services that meet the needs and wants of customers have to be designed, manufactured, marketed, and delivered.
- ***Work Programs.*** Step-by-step work programs that ensure efficient production and delivery of high-quality products and services need to be developed.
- ***Material Resources.*** Effective programs for choosing and using the material resources, including financial resources, to be used in work programs need to be established.
- ***Unit-Performance Plan.*** Each unit has its own set of operations that contribute directly or indirectly to the delivery of products and services to the customer. The unit-performance plan sets year-long operational priorities for each unit and links its operations to the overall strategy of the organization. Linking operations to strategy is critical. Many strategic plans lie in drawers gathering dust because managers have not found ways of implementing plans within the system.

Organizational Dimensions

The "organization" is the way in which a system structures itself and pulls together its human resources in order to deliver business outcomes. The business should drive the organization, and the organization should serve the business. Unfortunately, too many systems become preoccupied with organizational concerns at the expense of the business. Organizational dimensions include the structure of the organization—functional units and subunits—and the deployment and utilization of human resources within these units. This may include the following:

- ***Structure and Division of Labor.*** Functional work units need to be established. Within those units, roles and task responsibilities need to be set up.
- ***Competence.*** The units and the people working within the units must be competent, that is, capable of achieving business outcomes. Once job roles and responsibilities are established, competent and compatible people must be hired into these jobs and effectively socialized into the culture of the organization.
- ***Teamwork.*** Processes need to be established to ensure that units and people within units work together in teams whenever working in teams will deliver better business outcomes.
- ***Communication.*** Communication is the lifeblood of the system. The organizational culture must call for (and individuals must have the skills needed for) effective information sharing, feedback, appraisal, problem solving, innovation, and conflict management among units and among individuals within units.
- ***Reward System.*** Incentives to do all the above must be provided, disincentives must be controlled, and performance rather than nonperformance must be rewarded.
- ***Individual Performance Plans.*** A sense of direction must permeate the entire system. Individual performance plans, established through a dialogue between individuals and their supervisors, focus on yearly work priorities for each person in the system. These plans link individual performance to the unit-performance plan and to the overall strategy of the system. If performance plans do not support overall strategy, instead of being tools used in the pursuit of excellence, they become administrative burdens.

Management and Leadership

If all the above is to happen, companies, institutions, and agencies need both effective management and ongoing leadership. Managers are both *managers of process and managers of people.* As managers of process, they are responsible for seeing to it that the elements of Model A are in place in their companies or units. Effective managers *coordinate and facilitate* the business and organizational elements of Model A and make

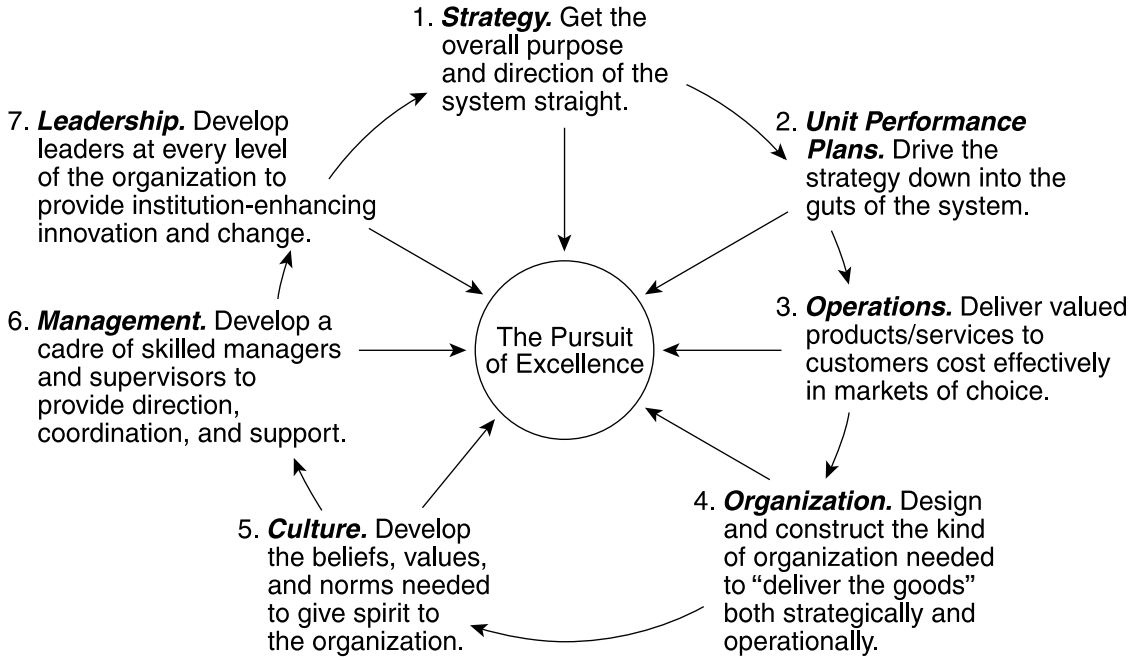
sure that things happen. However, since they make things happen through others, they are also managers of people. Two reasons why managers do not manage well are that (a) they do not have models of managing either process or people, and (b) they do not receive much feedback. Model A emphasizes the importance of developing a "culture of feedback" within the system.

Leadership is an interactive process involving the leader, team members, and the change situation. Leadership goes beyond effective management to innovation and change. Effective leadership is not predicated in the traits of the leader but, rather, on what he or she accomplishes. Leadership means developing vision, turning visions into workable programs, communicating these programs in a manner that generates excitement and commitment, creating an environment of problem-solving and learning, and making sure that everyone persists until the program accomplishes what it had intended. Managers who are leaders continually pursue *incremental* change.

Managing the Shadow Side of Organizations

Egan does not focus heavily on the "shadow side," as he plans to make it the subject of a separate book at a later date. Nevertheless, he feels that it deserves mention. The "shadow side" includes the *arational* factors that affect both business and organizational dimensions of the system. The ability to manage the "shadow side" often determines whether a particular manager is successful or unsuccessful, mediocre or excellent. Egan is explicit in stating that wise managers know how to deal with the following "shadow side" elements:

- ***The Natural Messiness of Organizations.*** Organizations are loosely coupled systems in which the elements of business, organization, management, and leadership are only approximated. For example, strategy and operations are not always well integrated. Wise managers know the looseness of the system and how to work with it. They understand not just the formal system but the informal system as well and know when to intervene and when to leave it alone.
- ***Individual Differences.*** Individuals who work within the system have their differences, idiosyncrasies, and problems, which need to be addressed and managed. Wise managers design technologies that people can use and structures within which people can live.



The Logic of the Pursuit of Excellence

- ***The Organization As a Social System.*** Organizations are social systems with accompanying beliefs and drawbacks. Internal cliques and friendships sometimes hinder the business of the system.
- ***The Organization As a Political System.*** Because most organizations must deal with such realities as power, authority, scarce resources, the protection of turf, and differences in ideology, they are political systems. Wise managers understand and manage the politics of the system at the service of system-enhancing agendas.
- ***Organizational Culture.*** Organizations tend to develop their own cultures and subcultures. The shared beliefs, values, and assumptions in an organization can either enhance or inhibit the system's effectiveness. The culture is the largest and most controlling of the systems, because it sets norms for what may or may not be done in all the other "shadow-side" areas.

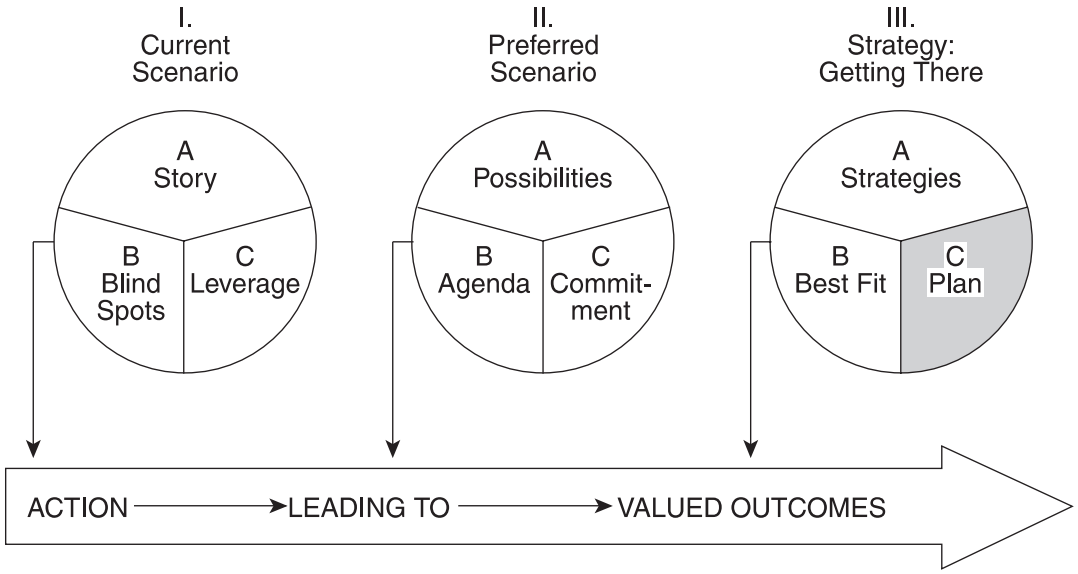
MODEL B

Model B, in outline form, looks deceptively simple and has three stages:

- Stage one, assessment of the current scenario;
- Stage two, creation of a preferred scenario; and

- Stage three, design of a plan that moves the system from the current to the preferred scenario.

The three stages are essentially cognitive in nature, and their ultimate justification is *action* that produces *valued outcomes* or *results* for the company or institution. Too many organizations expend a great deal of effort on change that leads nowhere. These three stages and their relationship to action or implementation are illustrated below.



A Model for Organizational Change

Notice that the focal point of the model is action leading to desired outcomes. Model A (assessment of and design of excellence into the system) is important, but only if it leads to changes that produce valued, organization-enhancing outcomes.

Stage I: Assessment of the Current Scenario

Stage I consists of finding out what is not going right or what is going wrong in terms of problems, unmet needs, unused resources, unexploited opportunities, unmet challenges, and so forth. Stage I has three distinct but interrelated steps.

1. ***Assess deficits and identify unused opportunities.*** The outcome sought in this step is a clear understanding of the problems and opportunities facing the organization. Companies and institutions with *cultures of vigilance* continually monitor both emerging problems and opportunities. They get to the roots of chronic performance problems and missed opportunities and do something about them.
2. ***Challenge blind spots and develop new perspectives.*** If organizations are to do things differently, they must begin to see things differently. This means that they must be open to being challenged by both people and events to develop new,

more realistic, and more creative perspectives on business, organizational, and leadership realities. Companies and institutions that are willing to admit that they have developed blind spots and that are willing to do whatever is necessary to have them challenged are much more likely to pursue excellence than are those that remain defensive about their shortcomings.

3. ***Choose high-impact problems and opportunities.*** This step deals with sorting the problems and opportunities revealed during assessment, finding points of *leverage*, and gathering data at the service of action-oriented clarity and specificity. The full organizational story may reveal a whole range of organizational problems and unused opportunities, or the problems and opportunities may be few but complex and far-reaching. Because everything cannot be done at once, it is essential that high-priority problems and opportunities be chosen for attention.

Stage II: Creation of a Preferred Scenario

Stage II deals with *what* needs to be accomplished and consists of determining what the organization, organizational unit, program, or project would look like if it were in better shape. A preferred scenario deals with what an organization needs and wants, not with how it is to be achieved. Stage II has three distinct but interrelated steps.

1. ***Develop a range of preferred possibilities or scenarios.*** This step involves brainstorming possibilities related to a better future for the company or institution, a future in which the organization is renewed, the problem is solved, the opportunity is developed, or the challenge is met.
2. ***Choose the best possibilities and develop criteria to package them in a realistic preferred scenario or agenda.*** Once the future-scenario possibilities have been brainstormed, they need to be evaluated for their relevance, specificity, realism, adequacy, fit with actual or proposed organizational culture (assumptions, values, norms), and consequences.
3. ***Present the agenda and get commitment to it from key stakeholders.*** The final step of Stage II involves making sure that key players are "buying into" the preferred scenario. One can start early by making sure that key stakeholders are involved in the identification of problems and opportunities and in the development of a range of new-scenario possibilities.

Stage III: Design of a Plan To Move the System from the Current to the Preferred Scenario

Stage III is a "getting there" stage and consists of developing an action strategy or program to move from the current to the preferred scenario. Stage III deals with how results are to be accomplished and has three distinct but interrelated steps:

1. ***Brainstorming a wide range of strategies to accomplish each new-scenario outcome.*** Imagination is absolutely essential here. The temptation is to think of one or two strategies and then move immediately to action. If it is clear that the chosen strategy will do the job, this is fine. However, in many cases, the failure to brainstorm a range of strategies leads to either ineffectiveness (the chosen strategy does not work) or inefficiency (a different strategy would have accomplished the desired outcome at a lower cost or with less turmoil).
2. ***Choose the best-fit strategy or package of strategies for each new-scenario outcome.*** Once the possible strategies have been identified, change agents need to choose those that provide the best fit (i.e., strategies that are most effective and efficient in both the short and long runs).
3. ***Cast the strategy or set of strategies into the form of a workable plan.*** Some strategies are quite simple, and there is little need to work out a step-by-step procedure to accomplish some preferred-scenario outcome. Other strategies are more complicated, and organizational players need to determine what steps need to be taken and in what order. Working out a step-by-step plan or action program increases the likelihood that the change effort will move forward.

For Egan, it is extremely useful to have a model, framework, or template of business and organizational effectiveness in order to systematically search out both deficits and opportunities, to uncover blind spots, and to identify leverage points. Model A is precisely such a template. Model A answers questions such as "How do we design effectiveness and excellence into the system?" and "How do we ensure that excellence is functioning?" Model B deals with the pragmatics of organizational change and problem solving and answers questions such as "Where are we?"; "Where do we want to go?"; and "How can we best get there?"

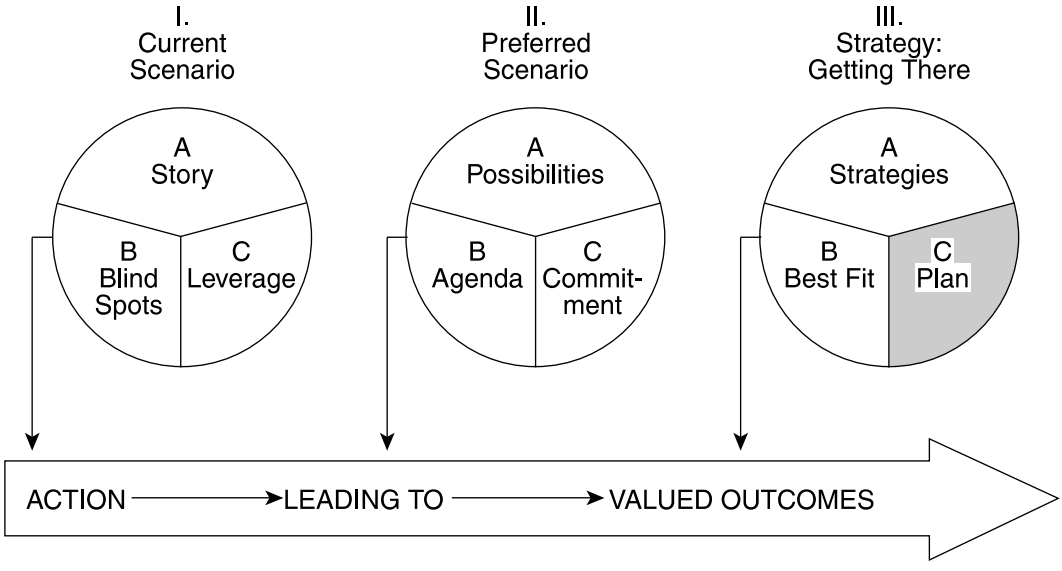
REFERENCES

Egan, G. (1988a). *Change agent skills A: Assessing and designing excellence.* San Diego, CA: Pfeiffer & Company.

Egan, G. (1988b). *Change agent skills B: Managing innovation and change.* San Diego, CA: Pfeiffer & Company.

Egan, G. (1989). Model A: A design, assessment, and facilitation template in the pursuit of excellence. In J.W. Pfeiffer (Ed.), *The 1989 annual: Developing human resources.* San Diego, CA: Pfeiffer & Company.

Nadler, D.A., & Tushman, M.L. (1977). A diagnostic model for organizational behavior. In J.R. Hackman, E.E. Lawler, & L.W. Porter (Eds.), *Perspectives on behavior in organizations.* New York: McGraw-Hill.



A Model for Organizational Change

OPEN-SYSTEMS PLANNING FOR CHANGE

In a changing world, the only constant is change. Constant change pressures contemporary organizations into continued modification of "business as usual," along with continued learning of new ways of interacting with the environment. The pressures include such things as governmental deregulation, high employee expectations, changing employee priorities regarding work and leisure, and increases in technology.

From an organizational perspective, the issue of change implies an adjustment to external conditions along with a corresponding increase in internal instability. In addressing this issue, Beckhard and Harris (1987) portray organizational change in terms of a *change-stability dilemma.* That is, how can leadership respond to the challenges of organizational change while at the same time maintain the internal continuity and stability necessary to carry out the organization's mission?

Beckhard and Harris believe that several elements are essential in order to balance the change-stability dilemma.

- A ***vision*** of the future;
- a ***sense of organizational identity*** (i.e., "reason to be");
- a ***sense of the interdependence*** between the organization and the environment;
- a ***scenario*** of the future (i.e., pictures and descriptions of what the organization should look like, including milestones or midpoint goals);
- a ***flexible organizational structure*** that allows for the most effective management of changed operations and new systems;
- effective ***utilization of advanced technology;*** and
- ***reward systems*** that "equally reflect organizational priorities, values, and norms and individual needs for dignity and growth."

In addition, Beckhard and Harris believe that in order for organizations to establish processes that incorporate the essential elements effectively, organizational leadership must develop a thorough understanding of:

- the nature of work in the information age;
- telecommunications technology and its potential role in the organization;
- the nature of culture and cultural change;
- the effects of human values on organizational performance and effectiveness;

- world-wide sociopolitical conditions (e.g., monetary issues, East-West and North-South relations); and
- the philosophy and technology of effectively managing the change-stability dilemma.

ORGANIZATIONAL SYSTEMS

Systemic portraits of large organizations typically include: elements of formal organization (e.g., structures, policies, procedures); elements of informal organization (e.g., norms, values, people conditions); elements of external environments (e.g., technology, competition, legislation); and elements of broader societal issues (e.g., women's rights, environmental quality). Beckhard and Harris propose that from a managerial perspective, management of organizational transition and change is a task of managing the various demands generated by *multiple constituencies,* both inside and outside the organization.

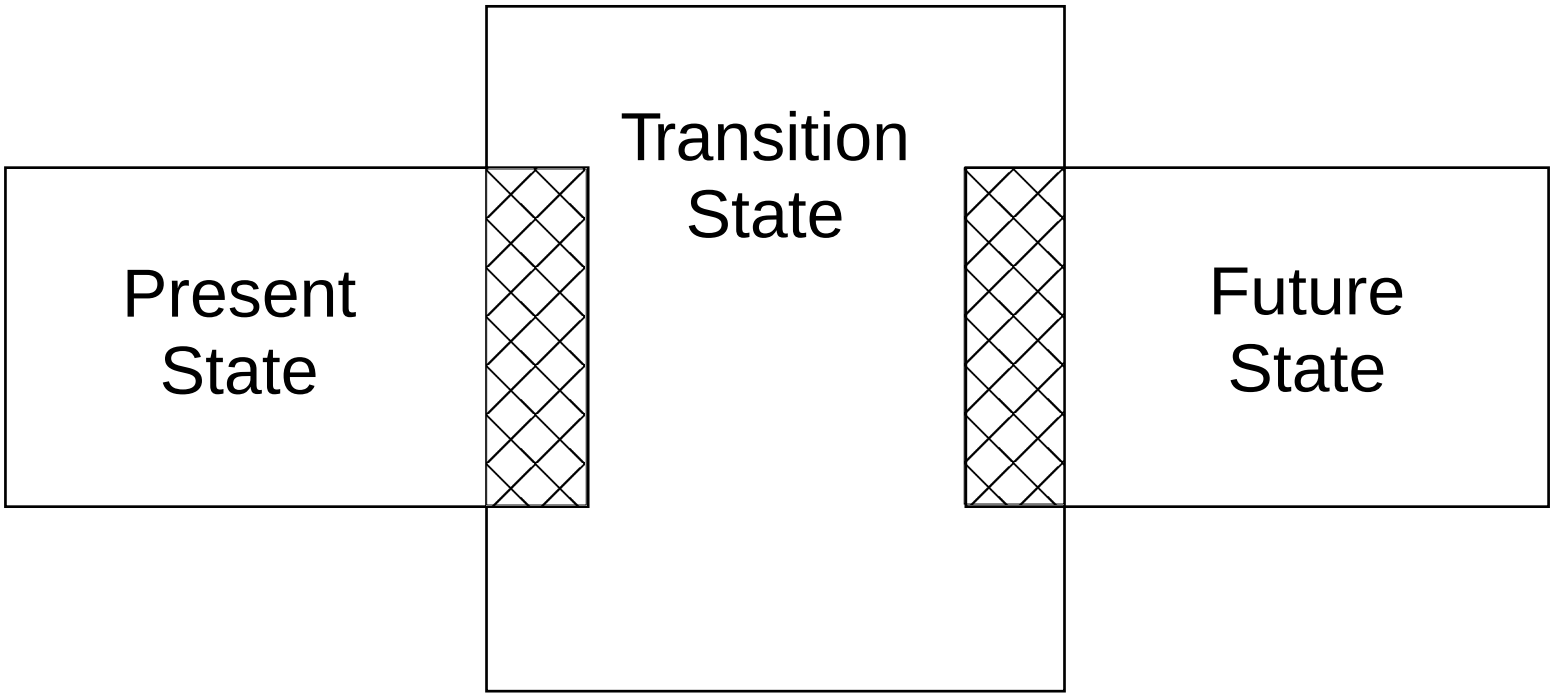
Most organizations contain three primary systems: social, political, and input-output. Within the *social* system, there are subsystems with various characteristics and goals, "but their activities must be coordinated or the parent system cannot function" (p. 24*). Political* systems are based on power and influence. The purpose of political behavior (strategy) is to gain some advantage for an individual or group, without regard for—and frequently at the expense of—others. Lastly, organizations are *input-output* systems, which means that they use some process to transform inputs (human and material resources) into outputs (services or products).

In summary, many environmental factors create demands to which organizational systems must respond. As environments change, organizations change. For many large and complex organizations, the response involves changes in the nature of work; tasks become more complex, and new tasks evolve. Change in the nature and complexity of work involves much more than a simple retraining of workers, it involves the redefinition and management of the cultural and behavioral environments of the organization.

THE CHANGE PROCESS

Initially, successful change emerges from a seven-phase diagnostic process, which Beckhard and Harris call *open-systems planning.* Open-systems planning is a preplanning "process of analyzing a situation, identifying the kind of social and technical environment necessary to operate effectively, and developing a strategy for getting there." The seven phases are:

1. Determine the organization's core mission or reason for being.
2. Chart the demands being made on the organization and prioritize the demands according to organizational mission and goals.



The Change Process

Adapted from Beckhard and Harris (1987).

3. Determine an organizational response for each of the identified demands.
4. Project future demands over a three-to-four-year time frame.
5. Determine where and what the organization would like to be in the next three-to-four years.
6. Determine what steps are necessary to achieve the desired state.
7. Analyze the cost effectiveness of the steps defined in step six.

All too often, there is confusion—especially in large, complex organizations—about the nature of the organizational mission, environmental demands, and organizational response strategy. The seven-step, open-system planning process provides a basic, shared understanding of mission, demand, and response strategy that allows the organization to proceed with integrated planning for change.

Beckhard and Harris note that, in addition to open-systems planning, successful change involves three explicit conditions: defining the *future state*, i.e., what the organization should look like when change(s) are complete; defining the *present state*, i.e., what the organization looks like now; and defining the *transition state*, i.e., the activities and processes necessary to transform the organization from its present state into the desired future state.

The change process builds on two major elements of diagnostic preplanning: the goal-driven definitions of present and future states. This involves defining transition activities and developing a "road map for the change effort." The road map specifies all activities, including crucial interventions and events during the transition period and decisions regarding:

- where to intervene first;
- the choice of intervention technologies; and
- transition-management structures.

For Beckhard and Harris, the management of complex organizational change is both science and art. The science is the hands-on tools and technology of change intervention. The art involves the judgement and expertise of change agents. They warn that one of the "biggest traps" for artists, as well as scientist, is the tendency to rush into action before adequate planning has been completed.

REFERENCE

Beckhard, R., & Harris, R.T. (1987). *Organizational transitions: Managing complex change* (2nd ed.). Reading, MA: Addison-Wesley.

ORGANIZATIONAL CHANGE

Change is a recognized part of organizational life. Dalziel and Schoonover (1988) define change as the planned or unplanned response of an organization to the pressures brought about by individuals, teams, coalitions, and special-interest groups both inside and outside the organization. No longer is it practical for organizations to speculate on whether or not changes will occur. It is a matter of organizational survival to respond effectively to change, and change can cause significant discomfort if it is dealt with inappropriately.

THE ROLE OF LEADERSHIP

A fundamental component of successful organizational change is the *change leader.* Change leaders are defined as those responsible for the process of change. Within organizations, change leaders are found at all levels and most frequently are those who sponsor, manage, and implement change. For instance, senior managers characteristically assume sponsorship roles and typically are the ones who sanction as well as provide financial and moral support for change efforts. Similarly, first- and mid-level managers characteristically live with the effects of change, and their skills and proficiency as change implementers and change managers often make the difference between successful or unsuccessful change. For Dalziel and Schoonover, change leaders emphasize action, take charge, and utilize a can-do attitude to "harness and control the potential chaos and distress" brought about by change.

The mental or emotional positions adopted by change leaders play a pivotal role in whether or not change efforts are effective. The three leadership attitudes that tend to create problems for change efforts are *visionary, technocratic,* and *sympathetic.*

- ***Visionary change leaders*** view change as necessary and tend to be supportive of change efforts. However, visionary change leaders often are overly optimistic and tend to make global assertions about the change prior to a thorough analysis of all the possible effects.
- ***Technocratic change leaders*** emphasize hard and quantifiable results while neglecting the concerns of the people who are affected by the change. The concerns of those affected, their emotions, and the process are viewed as barriers that need to be overcome in order to achieve a desired outcome. Short-term gains are accomplished at the expense of long-term resentment.
- ***Sympathetic change leaders*** focus on the concerns of the people who are affected by the change but they neglect to pay attention to hard and quantifiable results. The concerns and emotions of people are viewed as the primary target of

change intervention. As a result, change efforts often stall or move extraordinarily slow.

For Dalziel and Schoonover, the function of change leadership is to organize activities around the change. Any one of the problematic change-leader attitudes can result in dysfunctional change leadership. However, in moderation, each problematic attitude contains elements that aid the change process. Thus, effective change leadership contains a synthesis of the three problematic attitudes, and each attitude can be utilized as required.

FRAMEWORK FOR CHANGE

Successful and effective change leadership requires a strategy or framework on which change activities can be based. Ideally, the framework would be developed from the successes of others. As a result of their research, Dalziel and Schoonover have developed a framework that emphasizes behaviors and activities that were observed in organizations experiencing successful implementation of planned change. The framework depicts what successful change leaders did to produce results and differentiate themselves from average change leaders. Based on their research, Dalziel and Schoonover believe that successful change leaders typically do the following:

- Prepare their organization for change;
- Make sure that the right people are working with them; and
- Follow an action plan that ensures that the organization will accept and incorporate the changes.

Thus, successful change flows from *organizational readiness, change-team roles,* and *implementation processes.*

Organizational Readiness

An analysis of an organization's readiness for change is the first step that successful change leaders take when initiating a change. Dalziel and Schoonover identify five areas of organizational culture that must be considered when preparing organizations for change.

1. ***An organization's previous experience in accepting change*** often is the most accurate predictor of successful change implementation. Those who have had positive experiences with change in the past are likely to have positive experiences with change in the future. Likewise, those who have had negative experiences with change are likely to have negative experiences in the future unless special attention is paid. In the case of negative change experiences, Dalziel and Schoonover recommend that change leaders:

- gather all pertinent information regarding past changes;
- spend extra time talking about the proposed change;
- provide ongoing feedback;
- arrange for an immediate positive outcome from the change; and
- publicize successes.

2. ***The clarity of expectations*** regarding the impact and effects of the proposed change are a major consideration for change leaders. Change leaders need to pay particular attention to the varying expectations of diverse work groups and across various levels of the organization in order to define and emphasize common interests.
3. ***The origin of the idea or problem,*** or where in the organization the idea for change came from. Based on the fundamental law of change (i.e., the more distance there is between those who define the change and those who have to live with its effects, the higher the probability that problems will develop), Dalziel and Schoonover contended that the place of origin of the change is a reliable indicator of the degree of difficulty to be encountered.
4. ***The support of top management*** is especially critical during the initial phases of change and remains an important consideration throughout the change process. In the most successful change efforts, top management is highly visible and actively participates throughout the entire project. In less successful projects, top management functions in a less visible role of "provider of capital."
5. ***The compatibility of the change with organizational goals*** describes the degree of correspondence between the proposed change and the current organizational situation. Whenever possible, changes should be integrated into the organization's overall goals and mission in order to facilitate the transition between old and new and start the change in an accepting environment.

Change-Team Roles

Having the proper personnel in place to implement change is the second major point of consideration for successful change leaders. Adequate implementation of the following six *change-team roles* is another critical factor of successful change.

1. ***Inventors*** are skilled in providing the impetus and energy to initiate change efforts. Inventors provide ideas, create, discover, and adapt available information into "concepts, models, and plans" that take into consideration potential problems, new technologies, and the like. Inventors are often "big picture" people who tend to view change with global perspectives.
2. ***Entrepreneurs*** are skilled in obtaining and managing resources and developing networks of influence. Entrepreneurs perceive possibilities and opportunities. They tend to function well with temporary solutions and frequently are tolerant

of mistakes. Entrepreneurs are goal directed and remain very focused on efficiency and effectiveness. The entrepreneur's ability to acquire resources—along with the inventor's ideas—is an imperative for initiating change.

3. ***Integrators*** keep those who implement the change focused and motivated by gaining acceptance for the change efforts and the change team. Integrators are skilled in integrating practical plans, strategic plans, and organizational issues. Integrators build teams and develop change-team identity. They frequently are the principal communicators to top management, associates, and change-team members.
4. ***Experts*** ensure that change efforts proceed at a functional level by providing their specialized technical skills and expertise to the change effort. Experts link the specialized information required for implementation with those who have to live with the change by monitoring change activity and updating change-team members and end users.
5. ***Managers*** are administrators, guides, regulators, and motivators. Managers also ensure that change efforts proceed at a functional level by focusing on productivity and end results. Successful change-team managers allocate and manage resources, involve others, and give appropriate support to subordinates and change-team members.
6. ***Sponsors*** are the persons in upper- and executive-management positions who ensure that the change effort has sufficient organizational support and resources. Sponsors lend their credibility and, along with integrators, function to keep those who implement the change focused and motivated.

Successful change teams employ a wide mix of member roles, and it is not unusual for one person to fulfill two or more roles. However they are structured, the most successful change teams utilize all six roles in the balance appropriate for their particular needs. Dalziel and Schoonover note that problems and difficulties labeled "communication problems" are usually nothing more than role deficiencies within the group.

The Implementation Process

Once an organization has been prepared for change, and the appropriate change-team members are on board, the implementation phase of planned change begins. Dalziel and Schoonover present five fundamental steps in the implementation phase.

1. ***Clarifying plans*** is the means by which change-team members learn whether or not plans for change are realistic, specific enough, and measurable. During clarification, plans are specifically defined, articulated, documented, and publicized.

2. ***Integrating new practices*** is the means by which an organization incorporates change into its day-to-day activities and processes. To ensure successful integration, Dalziel and Schoonover suggest that:
   - Implementation should begin with a "felt" need and a few key users;
   - Changes should be integrated gradually, with only small amounts of change being introduced at any one time; and
   - The change steps be publicized.
3. ***Providing education*** is the means by which end users receive information and an opportunity to learn about changes that are being implemented. Effective change education employs an assortment of educational techniques to create an environment in which learners seek self-improvement and further learning.
4. ***Fostering ownership*** is the means by which end users are empowered to incorporate new processes and procedures into their everyday behaviors. Programs that facilitate ownership on the part of end users typically utilize the talents and skills of end users, provide incentives for those who use new learnings, and encourage the expression of personal opinions about the change.
5. ***Giving and receiving feedback*** is the means by which change-team members and end users are able to evaluate the effectiveness of change efforts. Change leaders utilize a wide variety of feedback techniques (for example, brainstorming and group-feedback processes) to solicit end-user and organizational feedback.

REFERENCE

Dalziel, M.M., & Schoonover, S.C. (1988). *Changing ways: A practical tool for implementing change within organizations.* New York: AMACOM.

ORGANIZATIONAL RENEWAL

The only predictable force affecting any organization is change. Yet, change occurs in unpredictable ways. Organizations that adapt effectively to the demands placed on them by changes within their operating environments and that actively manage those changes are what Robert Waterman (1987) calls *Masters of Renewal.*

Waterman believes that changes in the environment lead to changes in what organizations are required to do in order to justify their existence. Waterman maintains that organizations cannot avoid the effects of entropy, or improve, or develop and maintain excellence, without the ability to renew. In his view, *renewal* is

- analogous to revitalization;
- describes organizations' ability to sense changes in what is required from them by the environment; and
- describes organizations' ability to reallocate existing resources or to acquire additional ones in order to ensure organizational excellence.

Some organizations renew easily, others experience difficulty renewing, and some do not renew at all. In a search to identify the specific means by which organizations renew, Waterman studied forty-five organizations in several different industries. All the organizations were successful and all had faced the challenge of renewal effectively. The organizations included large conglomerates, smaller corporations, not-for-profit and profit-making enterprises. Subjects included senior-level executives, managers, and rank-and-file employees.

LEADERSHIP

All the organizations studied were similar in the leadership styles of their top executives. Successfully renewed organizations were directed by leaders that Waterman labels *builders.* Builders are the transforming leaders (Bennis & Nanus, 1985; Burns, 1978) who aspire to make a difference in the world and to improve conditions for others. Builders are

> ...everyday corporate managers who simply find ways to renew and refresh their units, their departments, their companies. They are leaders who generate excellence, the ones we need to study, to emulate, to understand. (Waterman, 1987, p. 25)

Builders are contrasted with what Waterman labels *custodians* and *manipulators of wealth.* Custodians are caretakers who do not make any particular contribution to organizational renewal. They are "masters of inactivity," dislike change, and are just "there." Under "caretaking" leadership, organizations are not capable of sensing changes

in their environments. Thus, they are not capable of adapting to their environments and they eventually die. On the other hand, "manipulators of wealth" are very active. Unfortunately, all their actions are focused toward the acquisition of wealth. Nothing is created through their efforts that adds to the gross national product or that facilitates the growth of others. Wealth simply changes from one hand to another. Under manipulator-of-wealth leadership, organizations and the people within them simply are pieces in a high-stakes game.

DYNAMICS OF RENEWAL

Successfully renewed organizations are led with clarity and are made up of builders. Waterman found much variation in the behaviors of individual builders, yet there was identifiable consistency in the manner in which they led their units, departments, and companies. The consistencies clustered into eight general areas that Waterman calls the *dynamics of renewal.*

Informed Opportunism

The leaders of renewed organizations are not as concerned with detailed strategies as they are with setting directions for their organizations to follow. They recognize that there are many ways to attain any goal. They understand that an environment is a *stochastic* process—that it is driven by random events. Thus, they view the world as *probabilistic* and, accordingly, they place major emphasis on informationally based estimates. In a renewed organization, information—as opposed to facts—regarding all aspects of the environment is viewed as crucial to the organization's ability to estimate future conditions. Based on this information, the leaders are able to call on their intuition or "sixth sense" to take advantage of or to invent opportunities within the environment.

Renewal leaders welcome planning as long as the plans do not become so detailed and cumbersome that they are inflexible. The value of planning is its role in accumulating information, reinforcing culture, identifying issues and crisis areas, improving communications, and the like, so that the organization is not surprised by events in the environment. More value is placed on the planning process than is placed on the plan itself. Information from the process of planning is considered a strategic advantage, and the flexibility that is afforded by nonconstraining plans is considered to be the organization's fundamental strategic weapon.

Direction and Empowerment

Within renewed organizations, everyone, from the top executives down to handson employees, is treated as a *source of creative input.* Employee initiative is valued; ideas are solicited and used; and the belief prevails that employees know best how to do their particular jobs. Management's function is to establish direction, and employees are *empowered* to figure out the best ways to do things. Thus, the directing of task behavior

in renewed organizations is a balance between managerial control and employee responsibility.

Waterman describes this type of behavior as *directed autonomy.* Management determines the boundaries of a broad *solution space,* and employees assume responsibility for finding the best way to operate within that space. Most importantly, the testing of boundaries is encouraged in order to ascertain whether the boundaries continue to be appropriate.

Friendly Facts, Congenial Controls

Within renewed organizations, facts are regarded as friends, and internal financial controls are viewed as a means to free the organization from the realm of opinion. Renewed organizations have a passion for facts, especially for facts that can be used easily to check organizational progress. Internal controls, such as budgets, audits, and inventory controls, provide the means by which managers can determine whether their units, departments, or organizations are on track and make worthwhile decisions about costs, quality, and resources. Good controls are not necessarily complex; their purpose is to quantify organizational performance and to alert managers to a need for renewal.

Traditionally, controls are utilized by organizations primarily as feedback mechanisms that provide management with data that is *reacted to.* Renewed organizations utilize the information provided by controls to *anticipate* potential events. Waterman calls this proactive stance *feedforward.* Feedforward is not the same as forecasting; it is more like playing "what if" with multiple scenarios. The resulting information adds significantly to management's informed opportunism and its ability to consider probabilistic future events.

A Different Mirror

Organizations, like people, can slip into patterns of familiar and comfortable behavior, that is, *habits.* Once habitual patterns of behavior have been adopted, management tends to become isolated and preoccupied with the internal affairs of the organization. This tends to diminish management's perception of external events, dull the organizational sense of urgency, and affect the organization's ability to revitalize.

Leadership within renewed organizations is what Waterman labels *habit breaking,* that is, specific actions are initiated to encourage managers to interact with others, to break out of habitual patterns, and to view the organization in different ways. Renewal leaders are curious, attentive to their environments, and ask for ideas from others (including competitors) both inside and outside their units, departments, and organizations. They utilize an assortment of listening techniques to view the world from the reality of others—through a different mirror.

Teamwork, Trust, Politics, and Power

Teamwork and trust are emphasized in the philosophies of renewed organizations. There are noticeable absences of negative political behavior and positioning among top executives. In fact, top executives are highly cooperative and skilled in positive, nonmanipulative political behavior. Although the individual personalities of top executives vary, each executive clearly is in charge and none utilizes a "hard nosed," authoritarian approach. Waterman asserts that team-oriented top executives are the major forces behind organizational renewal. Interestingly, the executives studied by Waterman were, for the most part, interchangeable with one another and easily could have been replaced by others within their organizations. Each executive was surrounded by highly capable people and each encouraged high levels of relaxed, open, and cooperative exchanges of information.

In renewed organizations, high levels of trust exist between departments, people, and management. It is assumed that all organizational members are trustworthy, so trust is viewed as inherent in the individual, not as something to be earned. Employees are trusted to do well for the organization, and, in return, the organization is trusted to help foster the *dignity of the individual.* Of course, the emphasis on teamwork and trust does not mean that there is no political behavior. Yet, responsibility always exceeds authority, and if something needs to be done, the expectation is that it will be done. Political discussions center around persuasion, bargaining, consensus, surfacing and resolving conflict, and getting the job done. Particular efforts are made to avoid putting departments, units, people, and vendors in situations in which they are competing with one another; cooperation is perceived as preferable to competition.

Stability in Motion

For Waterman, the most important word in renewal is *status quo.* Even though renewed organizations understand that the only constant is change, they also understand that high levels of structure, stability, and consistency are required in order to provide a stable foundation on which to base change. Stability and consistence are especially important in regard to organizational beliefs, values, and vision. Managers experiment continually in order to find what Waterman calls the *dynamic imbalance*—the state in which change is the norm. Yet, there is enough stability to encourage risk taking and enough change so that organizational members extend themselves and the organization renews. Thus, renewal is brought about in small steps, and the problems associated with renewal are viewed as ordinary problems to be resolved.

Attitudes and Attention

In renewed organizations, the expectations of management significantly affect renewal outcomes. Management is involved in the renewal process and communicates its involvement by committing time, energy, and attention to renewal efforts. Pronouncements and behavior are consistent, and management strives to minimize or

remove *fear, uncertainty, and doubt* within the organization while communicating confident, realistic, and "*toughminded" optimism* about the future.

Additionally, renewed organizations adopt a *total-quality* approach in their relationships. Expectations are high and clearly communicated; everything that can be quantified is measured, and the measurements are useful both for communicating expectations to employees and for identifying and resolving ordinary problems before they become big issues.

Causes and Commitment

At any point in its life, an organization faces a series of issues—problems, opportunities, and challenges—that need to be dealt with. Issues lead to causes, and renewed organizations run on causes. The cause varies with each particular organization (e.g., quality, cost reduction, service, the customer, survival), but in each the cause is communicated in a manner that presents an element of risk and challenge to organizational members.

Renewed organizations recognize that people want their work to be meaningful and to fulfill basic psychological needs. Waterman believes that the basic psychological needs of humans at work are:

- To produce something worthwhile;
- To help others;
- To obtain recognition;
- To be free or innovative;
- To beat an opponent; and
- To earn the respect of the community.

The renewed organizations in Waterman's study recognize that causes must be worthwhile and aligned with people's basic psychological needs. Accordingly, the only causes that are advocated are those that are need fulfilling and which members of the organization can identify with, believe in, and support.

Renewed organizations focus only on a few issues at a time and communicate their causes clearly, honestly, and consistently in order to bring about maximum commitment from all. A cause is not valuable unless organizational members are committed to its resolution. Therefore, cause and commitment are the bases of organizational renewal. Waterman cautions, however, that commitment has its negative side because it can be used to manipulate others and can be turned into "consistency traps" that filter information and hinder organizational decision-making processes.

CONCLUSION

Change is threatening to both organizations and organizational members. Yet, all organizations that survive modern organizational environments will have an internal capability to maintain their competitive advantages and meet the threat of change. Waterman (1987) defines this internal capability as *renewal factors* that transform "threat into issue, issue into cause, and cause into quest" (p. 338). All these factors are necessary for organizational survival and growth.

REFERENCES

Bennis, W., & Nanus, B. (1985). *Leaders: The strategies for taking charge.* New York: Harper & Row.

Burns, J.M. (1978). *Leadership.* New York: Harper & Row.

Waterman, R.H., Jr. (1987). *The renewal factor: How the best get and keep the competitive edge.* New York: Bantam.

STRATEGIC MANAGEMENT OF CHANGE

Change has become a way of life for most organizations. No longer is it possible to focus on "business as usual." As organizational environments exert pressure for change, organizations must adjust if they are to survive and prosper. Changes exist in both the external and internal environments. Noel Tichy (1982) categorizes the forces that exert pressures for change on organizations in three management areas: technical, political and cultural.

- *Technical* refers to pressures for change brought about by changes in technology and economic conditions, e.g., advanced high-tech equipment, changing interest rates, and increased competition.
- *Political* refers to pressures for change brought about by issues associated with power, influence, and the allocation of resources, e.g., who has authority, who is rewarded, and who decides how rewards and resources are allocated.
- *Cultural* refers to pressures for change created by the values and beliefs of people, e.g., demographic composition and cultural diversity of the labor pool and societal values.

Technology, politics, and culture describe three fundamental areas of managerial responsibility that continually are in need of attention and adjustment. Tichy says that all three areas continually present problems that must be redefined and dealt with on an ongoing basis but are not solved. Technology tests managerial ability to strategically allocate people, money, and technological resources; politics tests how and to whom resources and influence are allocated; and culture tests managerial ability to build human resource systems that strategically create the "normative glue" that connects organizational members. Each area offers challenges and opportunities and each demands attention. At the same time, issues within each individual area are interrelated as if they were a "strategic rope."

STRATEGIC ROPE

At first glance, organizations look very much like a piece of rope. Rope from a distance appears as a total unit; however, as one examines rope more closely, it becomes apparent that the single unit is comprised of individual strands woven together. An even closer examination reveals that each individual strand is made up of yet even more individual units. The three areas of managerial responsibility—technical, political, and cultural—fit together much like the strands of a piece of rope. Similarly, as damage to a single strand of rope weakens the overall integration and strength, damage and

inattention to technical, political, and cultural issues significantly weakens the organization.

Tichy asserts that a thorough understanding of the ways in which environmental pressures impact organizational life is essential to the effective management of organizational change. The two vital concepts arising from an understanding of environmental pressures are, first, that the pressures are *systemic* and exist within a rope-like, interrelated system and, second, that they tend to be sustained by management systems of short-term vision.

MANAGERIAL TOOLS

Tichy believes that success in dynamic conditions requires a strategic realignment and strengthening of technical, political, and cultural systems. Managers have three fundamental tools with which to accomplish these tasks: *mission and strategy, organizational structure,* and *human resources management.*

- Use of mission and strategy tools consists of defining the organization's purpose, setting goals, developing action strategies, and all the managerial processes necessary to carry these out.
- Use of structural tools includes the ways in which tasks are defined and grouped, the ways in which people are coordinated to accomplish tasks, and the managerial processes that are utilized to make the structure work.
- Human resource management tools include recruiting, selection and placement, training and development, performance appraisal, and developing financial and nonfinancial reward systems.

STRATEGIC MANAGEMENT MATRIX

Tichy (1982) places the three areas of managerial responsibility and the three fundamental management tools into a nine-cell *strategic management matrix* (see figure, next page) to illustrate the usefulness of each particular tool in aligning the elements of all three systems. Technical, political, and cultural areas are positioned down the vertical axis, and managerial tools are placed across the top. Each intersecting cell identifies a series of related issues that must be addressed by managers who are attempting realignment efforts.

Technical

The technical row contains tasks that Tichy asserts are the subjects of mainstream management training and writing. Mission and strategy tools applied in the technical area are those that help to define organizational mission and purpose, that assess environmental opportunities and weaknesses, that assess organizational strengths and weaknesses, and that aid in choosing suitable resources to attain goals. Organizational structure consists of tools that aid in organizational-design issues related to task and

Managerial Areas	Managerial Tools		
	Mission and Strategy	*Organization Structure*	*Human Resources Management*
Technical System	Assessing environmental threats and opportunities. Assessing organizational strengths and weaknesses. Defining mission and selecting resources to accomplish it.	Differentiating: organizing work into roles (production, marketing, and so forth). Integration: recombining roles into departments, divisions, regions, and so forth. Aligning structure to strategy.	Fitting people to roles. Specifying performance criteria for roles. Measuring performance. Staffing and developing to fill roles (present and future).
Political System	Who gets to influence the mission and strategy. Managing coalitional behavior around strategic decisions.	Distributing power across the role structure. Balancing power across groups of roles (for example, sales vs. marketing, production vs. R&D, and so forth).	Managing succession politics (who gets ahead, how they get ahead). Designing and administrating reward system (who gets what and how). Managing the politics of appraisal (who is appraised by whom and how).
Cultural System	Managing influence of values and philosophy on mission and strategy. Developing culture aligned with mission and strategy.	Developing managerial style aligned with technical and political structure. Developing subcultures to support roles (production culture, R&D culture, and so forth). Integrating subcultures to create company culture.	Selecting people to build or reinforce culture. Developing (socialization) to mold organization culture. Managing rewards to shape and reinforce the culture.

Tichy's Strategic Management Matrix

From N.M. Tichy, "Managing Change Strategically: The Technical, Political, and Cultural Keys." *Organizational Dynamics*, Autumn, 1992, pp. 59-80.

departmental functions, task differentiation, and synthesizing organizational structure and strategy. Lastly, human resources management tools address issues related to attracting, selecting, and retaining suitable personnel; establishing standards of performance; establishing appraisal systems that assess present performance as well as future potential; and staff development and training. Tichy concludes that all managerial tools—mission and strategy, organizational structure, and human resources management—should be utilized simultaneously when management is aligning the technical system.

Political

The political row contains tasks that Tichy contends will consume a large quantity of management time, yet will be the least openly discussed. Mission and strategy tools applied in a political arena aid in the allocation of resources. Tasks include decisions that determine who has control and authority over, and the ability to influence, strategic issues and management of political alliances forming around strategic decisions. Organizational-structure tools employed in political areas consist of the distribution of power across role structures and the balance of power across groups and departmental lines. Human resources management tools address issues related to succession, design and administration of organizational reward systems, and the politics of appraisal, e.g., who is evaluated, how, and by whom.

Cultural

The cultural row contains managerial tasks associated with the values and beliefs of organizational members. Cultural mission and strategy tools aid in the growth of an organizational culture that supports the organization's mission and strategy by managing the influences of personal values and ideologies. Organizational-structure tools employed in cultural areas develop managerial styles consistent with the technical and political structure, develop subcultures that support functional roles, and create the "normative glue" for an overall organizational culture. Human resource management tools help to solidify cultural efforts by selecting and socializing organizational members who strengthen the culture and by managing reward systems in a manner that shapes and supports the culture.

IMPLICATIONS

Tichy proposes that use of the strategic management matrix forces an expanded awareness of managerial areas and their related tools. To be successful in dynamic environments, organizations must be willing to expend considerable amounts of energy in examining fundamental questions regarding their technical, political, and cultural systems. Strategic realignment that anticipates changes in operating environments can be facilitated by a straightforward analysis of the nine-cell, strategic management matrix.

REFERENCE

Tichy, N.M. (1982, Autumn). Managing change strategically: The technical, political, and cultural keys. *Organizational Dynamics.* pp. 59-80.

STRATEGIES OF CHANGE

People and groups approach the prospect of change in various ways. There tends, however, to be a certain amount of consistency in the strategies employed by one group or by one person over time. Olmosk (1972) documents several frequently employed strategies of change.

THE FELLOWSHIP STRATEGY

The assumption underlying this strategy seems to be, "If we have good, warm interpersonal relations, all other problems will be minor." Emphasis is placed on getting to know one another and on developing friendships. Groups that use this model often sponsor discussions, dinners, card parties, and other social events that bring people together.

The fellowship strategy places strong emphasis on treating everyone equally; this often is interpreted as treating everyone *the same way.* All people must be accepted; no one is turned away. When the group is making decisions, all members are allowed to speak, and all opinions are weighed equally. No fact, feeling, opinion, or theory is considered inherently superior to any other. Arguments are few, because conflict generally is suppressed and avoided.

Groups that use the fellowship approach recruit new members fairly easily and often generate a great deal of initial energy by giving people something to belong to. This may sustain the group for some time, even if its goals are unclear and its concrete accomplishments are few.

However, the fellowship approach tends to lead to certain problems. Because much of the initial commitment is to members rather than to ideas or projects, the group often begins to feel directionless; it has trouble stating what it is trying to accomplish. Often, fellowship-directed groups are unable to set priorities because they are too concerned with satisfying all their members. Therefore, as everyone must be heard and no one is allowed to be unhappy with a decision, one dissenter can immobilize the entire group. As a result, the group often has trouble implementing any decisions it is able to make.

Because fellowship groups are unable to face conflict, they tend to make unrealistic plans. Questions of economics, politics, or engineering feasibility often are overlooked. For example, many churches—most of which employ the fellowship strategy—have difficulty remaining financially solvent.

As plans are ignored or changed, it becomes increasingly difficult for groups that use this strategy to maintain the commitment of members. Members begin to sense that the group is floundering, that it is accomplishing little, and that they are wasting their

time. At this point, long-standing members begin to leave, and the group can survive only by finding new members who need to belong to something.

THE POLITICAL STRATEGY

Political strategists tend to believe that "If all the really influential people agree that something should be done, it will be done." They emphasize a power structure that usually includes not only formally recognized leaders but informal, unofficial leaders as well. Much of the work done under the political strategy is the result of the leaders' informal relationships.

The political strategy emphasizes the identification and influence of people who seem most able to make and implement decisions. It usually focuses on those who are respected and have the largest constituency in a given area. One's level of influence is based on one's perceived power and ability to work with other influential people to reach goals that are valued by one's constituency.

Members of groups that commonly employ the political approach seldom believe that all people are truly equal. They often view individual differences as unimportant unless these differences relate directly to power. Their primary emotional need seems to be for control and attention. They expend much energy on moves that flatter them and that ensure that others know of their influential status.

Political strategists often are good at getting decisions implemented. They excel in the mobilization of power and in the implementation of decisions. However, a few adverse decisions may severely limit a political strategist's influence and can completely alter the power structure in the group. Such a system often is unstable because of the ongoing shifting of positions.

Political strategists often have difficulty in maintaining credibility. Continual bargaining and compromising makes it difficult for a person to act consistently and to fulfill all the promises made to his or her constituents. Over time, this can lead to a loss of faith by the constituency and to a corresponding loss of power and influence for the leader.

People who use the political strategy often have trouble with questions concerning value systems and loyalty. When compromise is called for, it sometimes is difficult to distinguish between decisions that are acceptable to one's value system and to one's constituency and decisions that are made under pressure.

THE ECONOMIC STRATEGY

Economic strategists believe that "Money can buy anything or any change we want." They emphasize the acquisition of or—at the very least, influence over—all forms of material goods, such as money, land, stocks, bonds, and any other tradable commodity. This strategy is widely used in the United States and the Western world and is used most often by large corporations and by the very rich.

Inclusion in a group that espouses this approach usually is based on possession or control of marketable resources. Influence within the group is based on perceived wealth. Most decisions are heavily, if not completely, influenced by questions of profitability as measured by an increase in tangible assets. This approach is highly rational, based on the assumption that all people act more or less rationally from economic motives. As a result, such groups often have high needs for control and for rationality.

This strategy does have some drawbacks, however. As Herzberg (1966) points out, money and material rewards are *temporary* satisfiers. When people have been paid to make changes, they are satisfied for a while, but sooner or later they want more rewards. In order to maintain a change, it may be necessary to pay the people involved indefinitely. Furthermore, few people or groups have unlimited resources. Some things or changes simply may be too expensive, given the resources available. There often is no way to significantly increase the available resources in the short run.

As with all other strategies, the economic strategy suppresses certain questions, the most significant being, "Is this practice ethical?" This question, of course, cannot be answered within a strictly logical economic framework. This strategy also suppresses or ignores all questions that cannot be answered in terms of profit or loss, which includes most questions that deal with feelings and emotions.

THE ACADEMIC STRATEGY

The academic strategy assumes that "People are rational. If one presents enough facts to people, they will change." To this end, academic strategists undertake an unending series of studies and produce thousands of pages of reports each year.

Inclusion in a group that plans to use the academic strategy to solve problems or to make changes is based primarily on one's expertise in a given area or on one's desire to acquire such knowledge. Leadership and influence within the group generally depends on the degree to which the person is perceived as an expert. Newcomers to the field are considered to have little to contribute, while those with advanced degrees or many years of specialized study receive a great deal of attention.

People who use this strategy tend to approach most problems—and life in general—in a detached and analytical manner. They seek rationality and autonomy. They often pride themselves on their disinterest in the world around them.

The academic approach often produces much relevant information and makes that information available to the public. It may point out opportunities or consequences that would not be considered otherwise. It also may point out the causes of problems. However, the academic strategy is not effective in producing change. Because this approach emphasizes a detached method of study, it often is difficult to interest others in one's findings.

It also is difficult for researchers to mobilize the energy and resources needed to implement their findings. Researchers find the transition from disinterested observer to

advocate difficult to make. Therefore, unless someone else becomes interested in the results of a study, no action will be taken on the findings.

Finally, the academic strategy is time consuming. It takes time to do studies and to write reports. Unless the problem being studied is fairly stable, the situation when the report is finished may not be the one that existed when the study began. This sometimes is the excuse offered for failure to implement findings.

THE ENGINEERING STRATEGY

Users of this strategy try to bring about behavioral change without dealing directly with the people involved. The underlying assumption is, "If the environment or the surroundings change enough, people will be forced to change." Therefore, engineering strategists may spend a great deal of time studying physical layouts, patterns of interaction, and role descriptions in workplaces and classrooms without ever speaking to the employees or students.

Groups that approach change in this way often recruit members based on their technical skills. Group needs often are defined in terms of technical skills, which are considered more important than interpersonal styles. Within the group, influence is determined by one's perceived level of technical skills. Outside the group, influence is exerted primarily by changing the task structure or the environment.

Engineering strategists have a high need for rationality. They regard emotions as burdens and suppress them whenever possible. They emphasize task relevance and evaluate data and decisions accordingly. If the information or decision does not further the achievement of the task, it is considered irrelevant.

Because of a strong emphasis on the structural aspects of problems, this approach often leads to considerable awareness of the group's working environment. This may be particularly helpful in highly unstable situations, because new developments and information are discovered quickly. Because many management problems are related to information flow, this approach also may produce results when reorganization and redefinition of tasks result in new and shorter communication links.

Although this strategy does produce results in some situations, it also is subject to certain problems. Management literature is filled with studies and articles concerning ways to get people to accept change. Because people often are treated like objects or machines when problems are being analyzed, they often are resistant to changes that could be helpful. The people most directly affected often do not feel committed to the changes or do not understand them.

The engineering strategy also is time consuming. Although the need for change may be detected quickly, analyses and decisions concerning change take time to implement. Structural or environmental changes often produce unexpected results. For example, by reorganizing a department to break up troublesome cliques, one also may lose the close working relationships that made the department so efficient. Finally, most organizations contain few people whose perspectives and power are broad enough to

bring about widespread structural change. For this reason, the engineering strategy is used most frequently by high-level managers.

The question most often ignored or suppressed by groups that use this strategy is, "How will people feel about the change?" Because of the emphasis on rationality and efficiency, people's feelings are considered to be of little importance.

THE MILITARY STRATEGY

The military-style approach to change is based on the use of physical force. The name *military* has been given to this approach because it conveys the appropriate connotation to most people, not because the military is the sole user of this approach. Police departments, "revolutionary" student groups, and some teachers, for example, employ the military strategy.

The basic assumption behind this approach is, "People react to genuine threats. With enough physical force, people can be made to do anything." Therefore, considerable time is spent in learning to use weapons and to fight. Physical conditioning, strength, and agility are valued.

Membership in military-strategy groups often is determined by one's physical power and by one's willingness to submit to discipline. Both within the group and in its dealings with the external environment, influence is exerted primarily through the fear of authority and through the threat of punishment. Members of military-style groups need control, status, and security. They often tend to view most problems and relationships in terms of power, authority, threat, and exploitation.

The military approach excels when the maintenance of order is required. If threats are severe enough, most people are reluctant to misbehave and will try to get what they want within legal or acceptable channels.

Unfortunately, once the military strategy has been employed, the "enforcer" never can relax. As soon as he or she does, the change that is being imposed will disappear. In addition, force often is met with force. The use of force can start an ever-escalating cycle of violence. People resist having change imposed on them and will rebel whenever possible.

The average member of a militaristic group seldom asks who has the true authority to make decisions. Questions of right and wrong also are difficult, because the military approach dictates that "might makes right."

THE CONFRONTATIONAL STRATEGY

The confrontational approach to change is based on the assumption that if one can mobilize enough anger in enough people and force them to look at a problem, the required changes will follow. Although conflict is stressed, this strategy emphasizes nonviolent conflict rather than physical force.

Membership in such a group is based on one's ability to deal with and to use conflict in ways that benefit the group. Influence both within and outside the group is based primarily on one's ability to argue one's point and to deal with conflict without resorting to violence. Most of the early civil-rights groups and student groups utilized this approach to lobby for change.

Most confrontational groups base their arguments on a very narrow definition of "truth," which they express through highly idealized moral arguments. Often, members feel the need to express anger and their senses of self, which is how confrontations with other groups are generated.

This approach to change has several strengths. When a group adopts this approach, it usually is clear to its opponents that they must respond before the confronters will leave them alone. Therefore, this approach often gets people to examine problems that they would prefer not to address. Second, this approach draws attention and publicity to a cause. It is difficult to ignore one thousand people marching down Main Street. If the cause for which the people are marching catches the public's interest, the increased pressure on decision makers to take action may bring about change even if all other approaches have failed.

Still, the confrontational approach to change has several drawbacks. Although it often draws attention to problems, confrontation does not propose solutions. Because individual confronters often have little power to make changes, and because people join protest movements for a wide variety of reasons, it often is difficult for group members to reach agreement on alternatives or solutions to problems.

Second, because this approach is based on the use of conflict, it often polarizes people and creates a considerable backlash. People resent being confronted and sometimes will dig in their heels in response.

As confrontation escalates, one question tends to be suppressed: "Is there anything in the opponent's argument that is worthwhile?" Suggesting that one's opponent might be right about something often is scorned, and the person who makes this kind of suggestion can be treated accordingly.

THE APPLIED BEHAVIORAL SCIENCE MODEL

Most problems are extremely complex; a cut-and-dried approach to problem solving is not always the most effective or thorough. This is the basic assumption of the applied behavioral science (ABS) model.

Groups that use the ABS model tend to believe that as many people who will be affected by the decision as possible should be included in the decision-making process. Within the group, one's level of influence is based on one's knowledge and the degree to which one will be affected by the decision. Ideally, the person with the most knowledge about the problem and/or the person most affected by the decision should have the most influence.

The ABS model considers any information or theory that will shed light on the situation and help the group to reach a decision to be valuable. Group members' emotional needs are regarded as existing primarily for emotional and intellectual integration.

The ABS model has two main strengths: (a) a broad-based approach to problems and (b) a situation-centered focus. Groups that use the ABS model often consider and use more information than do groups that use other approaches to problem solving.

The ABS approach does have some drawbacks. First, because the ABS approach is eclectic and situation centered, people who use this strategy often have difficulty in answering seemingly simple questions. When one is considering how to motivate workers, for instance, one needs to examine the work situation, task requirements, workers' social needs and value systems, work precedents, and many other factors. Any solution that accounts for all these factors is likely to be long, complex, and somewhat confusing.

Second, because each situation is unique, users of the ABS model may appear to be somewhat inconsistent. A slight change in one variable under consideration may change the recommended solution completely. To the outsider, it may appear that the question has remained the same, but the answer has changed.

The question that is suppressed or ignored most often by people who use this approach is, "How should I do it?" There is no answer to this question, because the ABS model assumes that there is no one best way to solve a problem.

PRACTICAL APPLICATIONS

Each of the approaches has been described as a pure strategy. In practice, the approaches are seldom used in their pure forms. Rather, one strategy may predominate but may be modified by one or two other approaches. Therefore, if one becomes familiar with each strategy and its underlying assumptions, one will be able to select one or more strategies that will be most appropriate to the particular situation.

The main points of each strategy are summarized on pages 259, 260, 261, and 262.

REFERENCE

Herzberg, F. (1966). *Work and the nature of man.* Cleveland, OH: World.

SOURCE

Olmosk, K.E. (1972). Seven pure strategies of change. In J.W. Pfeiffer & J.E. Jones (Eds.), *The 1972 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

	Fellowship	Political
Basic Assumption	If we have good, warm interpersonal relations, all other problems will be minor.	If all the really influential people agree to do something, it will be done.
Inclusion	Get everybody in.	Get everybody in who possesses power.
Influence	Everybody equal.	Based on level and breadth of perceived power.
Perceptual Approach	Accepts all, shuts out none.	Stereotype; ignore individual differences unless they relate to power.
Emotional Needs	Warmth, love, and trust.	Control and attention.
Good at	Mobilizing initial energy.	Mobilizing power; implementing decisions.
Chronic Problems	Financial support; implementation of decisions; maintaining long-run commitment.	Maintaining credibility; fighting backlash.
Questions Suppressed	What's in it for me?; competence; individual differences.	Is my action consistent with my value system?
Most Often Used by	Churches; volunteer organizations; groups with limited power.	Those already in power.

Strategies of Change

	Economic	Academic
Basic Assumption	If we have enough money or material wealth, we can buy anything or any change we want.	People are rational; if one presents enough facts to people, they will change.
Inclusion	Based on possession of marketable resources.	Based on possession of knowledge and facts.
Influence	Based on perceived wealth.	Based on specialized knowledge and expertise.
Perceptual Approach	Materialistic.	Analytical and detached.
Emotional Needs	Control and rationality.	Autonomy and rationality.
Good at	Implementing decisions.	Finding causes; presenting relevant information.
Chronic Problems	Maintaining change and/or satisfaction; few people or groups have unlimited resources.	Implementing findings; mobilizing energy; getting people to pay attention or to read reports; time consuming.
Questions Suppressed	Is it ethical?; most feelings.	How do I feel about results? How should results be used?
Most Often Used by	Corporations; the very wealthy.	Outsiders; people in staff positions.

Strategies of Change (continued)

	Engineering	Confrontation
Basic Assumption	If the environment or surroundings change, people have to change.	If we can mobilize enough anger and force people to look at problems, the required changes will be made.
Inclusion	Based on possession of technical skills.	Based on ability to deal with and utilize conflict.
Influence	By changing structure or task environment.	By nonviolent argument.
Perceptual Approach	Task relevance and rationality.	Narrow belief in "truth."
Emotional Needs	Rationality, clarity, and structure.	Expression of anger; expression of self.
Good at	Awareness of surroundings and/or environment.	Forcing people to look at issues that they may not want to acknowledge; gaining attention and publicity.
Chronic Problems	Gaining acceptance for change; dealing with unexpected conse-quences; time consuming; few people can control structure.	Finding alternatives; dealing with backlash.
Questions Suppressed	How will people feel about it?	Is anything in opponent's argument worthwhile?
Most Often Used by	Top management.	Revolutionaries; the poor; unions.

Strategies of Change (continued)

	Military	Applied Behavioral Science Model
Basic Assumption	If we possess enough physical force, we can make people do anything.	Most problems are complex and overdetermined; a combination of approaches usually is required.
Inclusion	Based on possession of physical power.	Based on including as many of those affected as possible.
Influence	By fear of authority and by threat of punishment.	Based on knowledge and the degree to which one will be affected by the decision.
Perceptual Approach	Exploit for use of power structure.	Eclectic but situation centered.
Emotional Needs	Control, status, and security.	Emotional and intellectual integration.
Good at	Keeping order.	Using as much information as possible.
Chronic Problems	Rebellion; never can relax.	Making itself understood; not appearing "wishy-washy."
Questions Suppressed	Who should "really" make decisions? Is it right?	How should I "really" do it? Do you really know what you are doing?
Most Often Used by	Military; police.	Human resource development professionals; organization-development consultants.

Strategies of Change (continued)

DEPTH OF INTERVENTIONS

Roger Harrison (1970) observes that organizational-change interventions vary substantially in the amounts of emotional involvement they require of members of the organization. According to Harrison, change strategies differ in accordance with "how deep, value-laden, emotionally charged, and central to the individual's sense of self are the issues and processes about which a consultant attempts to obtain information and which he seeks to influence" (1970, p. 181). In other words, a structural intervention based on facts and research would be much less threatening, evocative of deep feelings, and emotionally disruptive than would be a three-day, marathon T-group that delved into innermost feelings.

Harrison identifies five levels at which organizational-change interventions take place. In increasing order of depth, these are:

1. ***Operations analysis or research;***
2. ***Individual performance;***
3. ***Instrumental process analysis;***
4. ***Interpersonal relationship;*** and
5. ***Intrapersonal analysis.***

According to Harrison, debate about which depth of intervention is best or most effective is largely unproductive. He says that different strategies accomplish different things; they are not different ways of doing the same thing.

DIFFERENT DEPTHS PRODUCE DIFFERENT OUTCOMES

Because the depth of intervention does not affect its effectiveness systematically, some question the importance of classifying interventions according to depth. But Harrison believes that interventions of different depths produce predictably different consequences that render them more or less suitable for different organizational situations.

Harrison contends that the different levels of intervention differ in focus, in concerns, and in the change strategies that they include. These are represented in the table on the next page.

THE RELATIONSHIP BETWEEN AUTONOMY AND DEPTH OF INTERVENTION

In the last half of the Twentieth Century, members of organizations may have attained greater levels of personal autonomy than ever before. Although he admits that he cannot prove the existence of a trend toward greater individual freedom in organizations, Harrison posits that greater autonomy requires deeper interventions in order to produce

Depth of Intervention	Focus	Concerns	Change Strategy or Strategies
Operations Analysis or Research	The big picture of the organization, with people considered interchangeable parts	Roles and functions of the organization's members	Manipulate organizational relationships
Individual Performance	Outcomes of organizational efforts	Observable behaviors or mutually agreed on goals	Selection and placement; management by objectives
Instrumental Process Analysis	Processes for achieving results	Modifying work behaviors and professional relationships	The Managerial Grid
Interpersonal Relationship	Feelings, attitudes, and perceptions within the work team	Quality of the relationships in the organization	The T-group
Intrapersonal Analysis	Increasing people's ability to perceive and to cope with experiences	Deep issues regarding people's identities and their intimate relationships	Marathon T-group sessions, creative risk-taking laboratories, and task-group therapy

Comparison of the Five Depths of Intervention

organizational change. As he puts it, "The more unpredictable and unique is the individual's response to the particular kinds of controls and incentives one can bring to bear upon him, the more one must know about that person in order to influence his behavior" (1970, p. 191). This is particularly true in the case of employees who are relatively privileged in regard to income or position. Privileged people are less susceptible to influence by bureaucratic or economic sanctions and inducements, and their behavior can be molded only by appealing to their inner motivations—which requires delving into the interpersonal and intrapersonal realms.

HOW DEEPLY SHOULD ONE INTERVENE?

Harrison gives consultants two rules of thumb about choosing an appropriate depth of intervention:

- "At a level no deeper than that required to produce enduring solutions to the problems at hand" (p. 201); and
- "At a level no deeper than that at which the energies and resources of the client can be committed to problem solving and to change" (p. 201).

Regarding the first rule of thumb, Harrison emphasizes the contradictory forces of autonomy in organizations and the unpredictability—even riskiness—of deeper interventions. As previously stated, autonomy tends to suggest to consultants the need for deeper probing into people's motivations. Because of the greater care and skill needed to intervene safely at deeper levels, it is wise to restrict the depth of an intervention to the shallowest level that will accomplish the intervention's goals.

Regarding the latter rule, Harrison warns consultants not to act like psychotherapists or clinicians by attempting to overcome client resistance in order to unearth the submerged, "real" problems. Because this deep probing often violates organizational norms, it usually will not produce durable change. With brute force, consultants may overcome resistance to deep interpersonal or intrapersonal analysis, but the changes will not endure because consultants are unlikely to build social structures to support the continuance of the changes. However, if consultants respond to their *felt needs*, members of organizations will invest adequate effort in continuing newly acquired behaviors.

The Issue of Privacy

Probing into intensely personal feelings and attitudes legitimately can be perceived as an intrusion on individual privacy. It seems that the deeper one intervenes, the more one invades others' privacy. However, Harrison suggests that the need for a deeper intervention actually acknowledges the fact that organizational members have greater *freedom* from traditional, impersonal methods of organizational control. One must try to get a person to *want* to do something if one cannot *make* the person do it.

REFERENCE

Harrison, R. (1970). Choosing the depth of organizational intervention. *Journal of Applied Behavioral Science, 6*, 181-202.

FIVE TYPES OF MANAGEMENT-CONSULTING FIRMS

According to Danielle Nees and Larry Greiner (1985), the growth of the management-consulting industry has made it increasingly difficult for clients to choose from "myriad and seemingly competent 'look-alike' consulting firms" (p. 68). Many consulting firms that once specialized in certain areas have expanded their services in order remain competitive, further clouding the distinctions among them.

Furthermore, clients of consulting services are not buying tangible products; instead, they are purchasing services. As Levitt (1981) put it, "Prospective customers who cannot experience the product in advance are asked to buy a promise...and usually don't know what they are getting until they don't get it."

The right consultant can do wonders for an organization; likewise, the wrong consultant can do a great deal of harm by misdiagnosing the organization's problems and overseeing the implementation of ineffectual solutions. The chances of such horrors occurring are lessened if the client and the consultant are properly matched. Through their studies of the management-consulting industry, Nees and Greiner (1985) discovered the following:

- Management-consulting firms' professional and organizational cultures vary. These cultural differences distinguish the ways in which they operate.
- The values held by the firm's consultants will affect the ways in which problems are diagnosed and the kinds of recommendations that are made.
- The more thorough the client's understanding of the differences between firms, the better and more informed that client's choice of consultant will be.
- There are five main types of management-consulting firms.

Nees and Greiner present a classification scheme for identifying the types of management-consulting firms. This classification can be helpful when one is contemplating hiring a consultant.

THE FIVE CATEGORIES

The five types of management-consulting firms that Nees and Greiner discovered can be distinguished by a particular *character*—a certain kind of consultant, a unique set of values, and a distinctive way of operating. The five types are as follows:

- ***Mental Adventurers;***
- ***Strategic Navigators;***
- ***Management Physicians;***

- ***System Architects;*** and
- ***Friendly Co-Pilots.***

Mental Adventurers (MAs)

The mental-adventurer type of consulting firm has a "think-tank" atmosphere. The consultants tend to hold doctorate degrees and to enjoy the intellectual stimulation of solving intricate problems—even if their solutions are impractical. Most mental adventurers have backgrounds in technological consulting; thus, they tend to use scientific methodology to solve problems. Statistics are valued; subjective evaluations are not. Such consultants often write for scholarly journals and do a great deal of research.

Mental adventurers often do not become acquainted with their client organizations' management staffs, front-line employees, or ways of operating. Rather, they associate mostly with the organization's researchers and engineers.

Such consultants tend to dislike telling people how to solve problems. They prefer to present written reports with new information and to allow their clients to make decisions and changes based on this information. Clients who require expert advice and action steps should not choose MA-type consulting firms.

Strategic Navigators (SNs)

Strategic navigators consult with top managers about the futures of their organizations through the technique known as *strategic planning.* In the strategic-planning process, the organization focuses on its "mission" and plans to realize its vision for the future. Strategic navigators gather data about the economic side of the organization's marketing and manufacturing processes. With the help of the SN, the organization develops an economic model that will guide the organization's actions pertaining to growth, acquisition, and divestment.

Both strategic navigators and mental adventurers analyze statistics and use analytical models. Both are more interested in facts and figures than in the working environment. The major difference between the two is that the SN is more concerned with economics than with technology.

Nees and Greiner say that strategic navigators tend to be young, highly intelligent, and experts with computers and statistics but with little experience in the business world. Such consultants excel at making economic comparisons between the client organization and its competitors and at suggesting appropriate strategic pathways. However, their suggestions sometimes are not implemented because SNs often do not tell the organization's executives how to follow those strategic pathways.

Management Physicians (MPs)

Management physicians specialize in the "guts" of their client organizations—the organizations' structures, cultures, values, and methods of leadership. Management-

physician consultants usually are experienced and have excellent interpersonal skills. They tend to generalize and sometimes diagnose problems before completing a thorough analysis. Most of the data used is subjective and is gathered through interviews.

Such consultants tend to emphasize feedback sessions, during which time they gradually bring the real problem to the surface. Their consulting projects take time and are open-ended; issues are brought to light slowly, and follow-up usually is required. In contrast to mental adventurers and strategic navigators, who are concerned primarily with solving problems, MPs are concerned with the implementation of solutions.

Management physicians are good choices for clients who are concerned with interaction, close relationships with their consultants, and a thorough approach. These consultants excel at untangling complex problems that are "imbedded in the inner workings of their organization" (Nees & Greiner, 1985, p. 75). However, MPs are not as accomplished at studies undertaken for research purposes or at strategic, economic market placement.

System Architects (SAs)

System architects are experts at designing and implementing management systems. System architects specialize in the delivery of practical, usable systems and services. They focus on the client organization's decision-making processes and can help to make them more logical and efficient. Such consultants often have diverse backgrounds but have technical interests in common. They tend to specialize in unique areas of expertise.

Because of these narrow areas of specialty, SAs excel at finding technical solutions to problems that fall within their areas of expertise. System-architect consulting firms often have "boiler-plate" procedures that can be used for many kinds of clients. This expertise and confidence greatly appeals to many clients who value the purchase of a known commodity. The client organization knows what it is getting and does not fear that the consultant will abandon it at the implementation stage.

The focus and narrow perspective of the system-architect approach, although valuable, sometimes can work to the client's disadvantage. System architects occasionally are not general enough in their thinking or in their approach to problems. As Nees and Greiner (1985, pp. 75-76) put it, "SA consultants have often been accused of a 'ready, fire, aim' mentality."

Friendly Co-Pilots (FCs)

The friendly co-pilot advises the chief executive officers (CEOs) of established client organizations. Most FCs are sole practitioners for whom consulting is a second career after many years as high-level executives.

Friendly co-pilots do not market themselves aggressively; rather, they "network" through the many executives with whom they are friendly. They specialize in building close relationships with CEOs, listening to CEOs' ideas, and acting as personal mentors. Friendly co-pilots have the greatest appeal for small, private organizations that cannot

afford the services of a big-name consulting firm and that do not trust young, less-experienced consultants.

The FC is neither on the cutting edge of management thinking nor possessed of infinite wisdom. For these reasons, an FC must have a number of experts in various disciplines—accounting, legal matters, and so on—to call on when specialized advice is needed. Nevertheless, FCs still appeal to clients because of their broad expertise and good judgment.

Clients of an FC must take care not to become so close to the consultant that the FC no longer has a unique, "outsider" perspective.

ADVANTAGES OF RETAINING A UNIQUE CONSULTING STYLE

The following table summarizes Nees and Greiner's typography of management-consulting firms. Most consulting firms are combinations of two or more types rather than a single type. What Nees and Greiner emphasize is that consulting firms *do* specialize and that one firm cannot fulfill every potential client's needs.

	Mental Adventurer	**Strategic Navigator**	**Management Physician**	**System Architect**	**Friendly Co-Pilot**
Knowledge base of consultants	Science	Economic	General management	Technology	Business experience
Role orientation toward client	Researcher	Planner	Diagnostician	Designer	Advisor
Approach to project	Statistical analysis	Modeling of key variables	Problem identification	Implementation of solutions	Sounding board for CEO
Focus of recommended actions	Creative answers	Future goals and objectives	Organization and leadership	Administrative procedures	Needs of CEO
Expected outcomes for client	More knowledgable decisions	More profitable market niche	Improved organizational effectiveness	Greater efficiency	Better CEO judgment

Characteristics of Management-Consulting Firms[*]

Nees and Greiner assert that management-consulting firms must, to some extent, remain true to their core styles in order to remain effective and competitive. They believe that by attempting to become too diverse, consulting firms will do new jobs poorly and will lose their unique abilities as well. Moreover, some consulting jobs require different types of expertise during different phases of the work. One mediocre,

[*] Reprinted, by permission, from D.B. Nees and L.E. Greiner, "Seeing Behind the Look-Alike Management Consultants," *Organizational Dynamics*, 1985, 68-79.

jack-of-all-trades consulting firm would be inadequate; two outstanding, "specialty" firms might be just right.

CHOOSING A CONSULTING FIRM

Nees and Greiner suggest that a prospective client use the following steps to locate a consulting firm whose style and area of expertise is in accord with the client's objectives.

1. ***Clarify the problem.*** The client organization should investigate the problem in detail to determine as best as possible what *kind* of problem it is and what problem-solving approach it requires.
2. ***Understand the organization's style and culture.*** Consider what type of business the organization is in and how it operates. If the organization emphasizes teamwork and empowerment, a mental-adventurer consulting firm, which operates independently from the organization and does not involve itself with the employees, would be a poor choice. A management-physician firm, on the other hand, might be very compatible. Remember that a consultant who is compatible with the organization will produce better results.

   If the organization and the consulting firm are not compatible, the organization has two alternatives:

   - ***Accept and adapt.*** This is a valid option if the organization believes that it can benefit from the consultant's services and that it can adapt itself well enough to the consultant's style to ensure a productive relationship.
   - ***Choose another consulting firm.*** If the organization-consultant relationship is likely to harm the organization or its members in any way, it might be better to search for a more suitable consulting firm.
3. ***Focus on the search for a compatible consulting firm rather than for an attractively priced bid.*** Nees and Greiner offer some questions that organizations can use to screen consulting firms:
   - Has the consulting firm had experience with this type of project?
   - What kinds of data will the consulting firm collect?
   - What are the backgrounds of the consultants who would work with the organization?
   - Who will serve as project manager?
   - What will the organization be required to do?
   - How will the results be delivered to the organization?
   - Will the consulting firm help the organization to implement its suggestions?
   - What makes the consulting firm different from others?
   - What client references can the consulting firm provide?

4. ***Hire more than one consulting firm if necessary to accomplish different objectives.*** If the organizational problem is multifaceted, engaging the services of consulting firms with expertise in the various problem areas may prove cost effective.
5. ***Call on the expertise of various organizational members before making a decision.*** A task force, rather than a lone executive, will have more collective experience, more points of view, and more insight into the nature of the problem. Task forces can be assigned to various phases of very large projects.

IMPLICATIONS FOR ORGANIZATIONS

Organizations must be good investigative reporters in order to uncover the true natures of consulting firms. Most consulting firms present similar images, and only careful questioning (and perhaps a tour of the firm's offices) will reveal the type of firm with which one is dealing. The nature of consulting work does not require that consultants alter their styles to suit their clients; it is up to the client to find a compatible consulting firm.

REFERENCES

Levitt, T. (1981, May-June). Marketing intangible products and product intangibles. *Harvard Business Review*, pp. 94-102.

Nees, D.B., & Greiner, L.E. (1985). Seeing behind the look-alike management consultants. *Organizational Dynamics*, 1985, 68-79.

Characteristics of Management-Consulting Firms

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FLAWLESS CONSULTING

A DEFINITION OF CONSULTING

Ronald Lippitt and Gordon Lippitt (1986) believed that all consultants were "helpers." Peter Block (1981) introduced the concept of *flawless consulting* to describe the helping behaviors of consultants. Block believes that consulting occurs any time that one attempts to change or to improve a system without having direct control over when or if the changes will be implemented. *Control over implementation* is the key issue in determining whether or not consulting is being done. Block strongly believes that consultants who have control over implementation are actually line managers and that calling oneself a consultant while functioning as line management may produce serious consequences during the implementation stage.

Recipients of consulting services are called *clients.* Clients hire consultants to give them suggestions and to help them to initiate actions that will bring about beneficial changes for the client. Actions taken by consultants are known as *interventions* and exist at two primary levels: interventions that attempt to *effect changes in the line organization,* and interventions that are designed to *teach someone or some client group something.*

MAKING CONSULTING FLAWLESS

Block assumes that all consultants have the potential for errorless (flawless) consulting. The consulting challenge, for Block, is to recognize one's internal potential for flawless consulting and then to allow the flawless consultant to surface from within. Flawless consulting is an attitude and a general philosophy of interacting with clients that encourages careful attention to both the *substance* (content) data and the *affective* (feeling) data generated during consultant-client interactions. The relationship goal for consultants is *authenticity,* which is expressing in words what is being experienced emotionally. For Block, the main objective of any consulting effort should be interpersonal authenticity, with emphasis placed on the emotional content of the consultant's and client's reactions to one another, the personal feelings generated during consultant-client interactions, and the ability to ask for and receive feedback. In doing so, the consultant greatly increases the probability of an effective intervention and behaves in a manner consistent with his or her values and beliefs.

ASSUMPTIONS AND GOALS

All consultants are value driven and bring into the consulting situation their own personal values, beliefs, and assumptions regarding the goals of consultation and the nature of healthy consultant-client relationships. These assumptions and beliefs

necessarily moderate the direction of consulting interventions. Block states that the following must be the case if the consulting is to be flawless:

1. ***Problem solving requires valid data in order to reduce confusion and inefficiency.*** Valid data include both objective and personal components. *Objective* data consist of information about ideas, events, or situations that is accepted as factual. Personal data also are facts but concern how people feel about what is happening to them.
2. ***Effective decision making requires free and open choice.*** Making decisions is relatively easy, but making decisions that everyone will support is considerably more difficult. When people have the opportunity to influence decisions that will affect them, the likelihood that they will support the decisions greatly increases. When people believe that a decision will affect them but that they can exert no control, they tend to become cautious and defensive and may withhold information as a means of self-protection.
3. ***Effective implementation requires internal commitment.*** People willingly commit themselves to causes that they believe will complement their interests. If what a person is asked to do and what a person wants to do are at odds, the likelihood of full commitment is not very high. Because true consultants lack control over the implementation of their recommendations, high levels of client commitment are crucial for effective implementation.

   Similarly, if the underlying values and assumptions of a flawless-consulting approach reflect the above beliefs, the consulting goals should reflect that philosophy. Flawless consulting seeks to:

   - ***Establish a collaborative relationship that makes the most of the resources of both the client and the consultant.*** Collaboration in this sense refers to joint involvement in determining how the stages of consultation will be carried out, not on the technical aspects of the problem.
   - ***Solve problems so that they stay solved.*** Often, problem solving involves teaching the client specific problem-solving skills and helping clients to understand that problems sometimes are symptoms of underlying difficulties.
   - ***Pay attention both to the problem content and to the process (how people interact around the problem).***

CONSULTANT SKILLS

Knowledge of consulting theory alone does not make a good consultant. Consultants also must possess the skills that permit a successful relationship to develop: *technical skills, interpersonal skills,* and *consulting skills.*

1. ***Technical Skills.*** The consultant needs to know what the client is talking about. For example, it would make little sense for someone without an accounting background to consult on the technical aspects of an accounting problem. The

experience base would be lacking, and the consultant would not know what questions to ask or what an effective accounting system should look like. The foundation of consulting skills lies in technical know-how.

2. ***Interpersonal Skills.*** Flawless consulting is relationship based. Consultants must be able to interact with others in a manner that maintains relationships; they must be able to put ideas into words, to listen, to give support, to reasonably disagree, and to give feedback.
3. ***Consulting Skills.*** Every consulting project progresses through five phases (Block, 1981; Lippitt & Lippitt, 1986):
   - ***Entry and Contracting;***
   - ***Data Collection and Diagnosis;***
   - ***Feedback and the Decision To Act;***
   - ***Implementation;*** and
   - ***Extension, Recycle, or Termination.***

Each phase is characterized by a set of challenges and tasks that must be resolved before the consultant can proceed to the next phase. Failure to work through each consulting phase sequentially almost always spells disaster. The figure on the next page provides an overview of consulting skills.

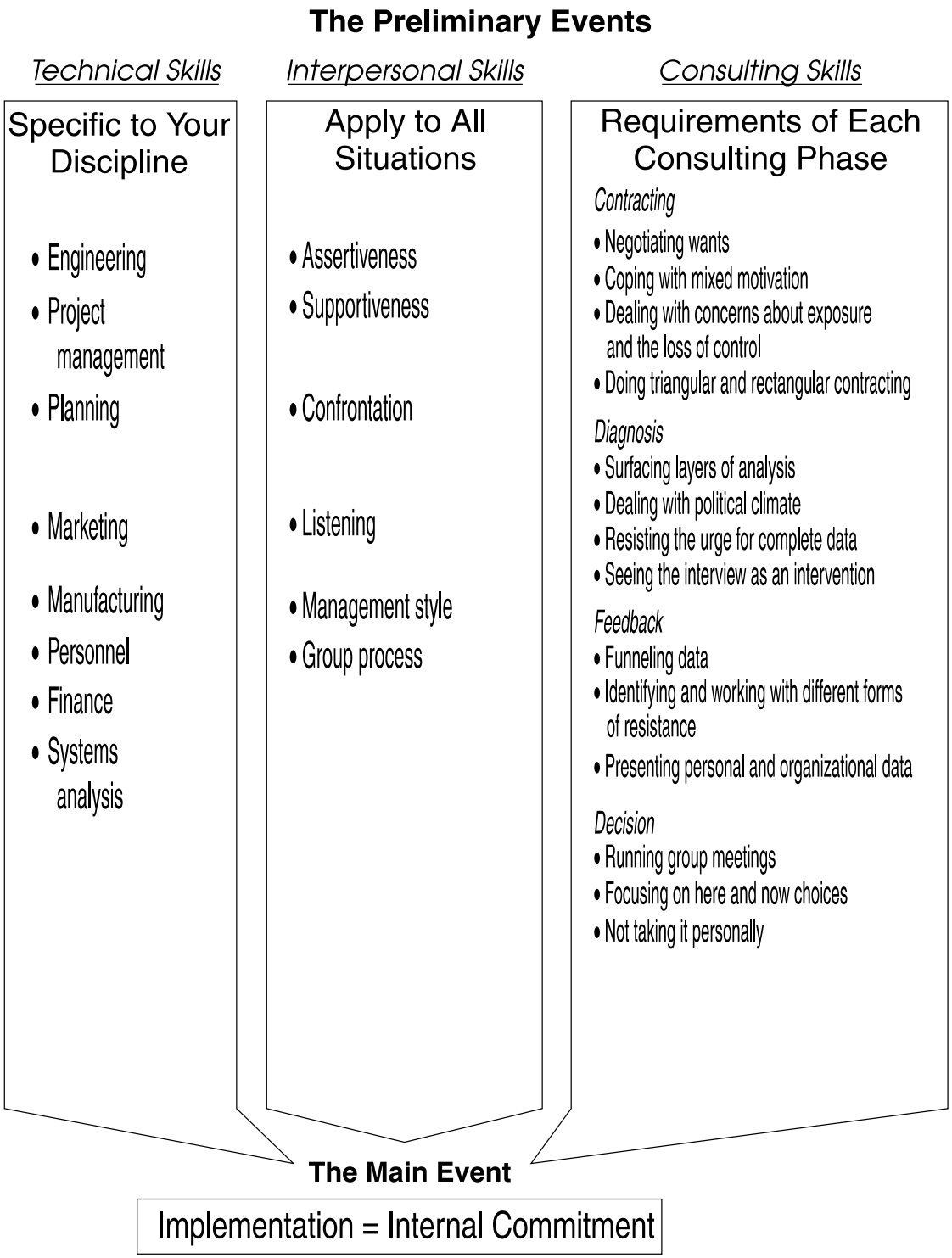
The major theme throughout a flawless-consulting approach is the focus on the affective and interpersonal aspects of the consultant-client relationship. This approach requires the internalization of values and beliefs, allowing a relationship to develop in which the client and the consultant share equally in the development and planning of consulting interventions, establish high levels of trust, and "own" their feelings about the relationship.

REFERENCE

Lippitt, G., & Lippitt, R. (1986). *The consulting process in action* (2nd ed.). San Diego, CA: Pfeiffer & Company.

SOURCE

Block, P. (1981). *Flawless consulting: A guide to getting your expertise used.* San Diego, CA: Pfeiffer & Company.



An Overview of Consulting Skills

A GESTALT APPROACH TO CONSULTING

Organizational consulting usually is described in terms of three primary models: purchase, doctor-patient, and process consultation (Schein, 1988). *Purchase models* refer to the purchase of expert information and advice; *doctor-patient models* refer to the purchase of diagnostic and prescriptive services; and *process consultation models* refer to collaborative client-consultant relationships in which consultants function as facilitators and help clients learn to improve their internal problem-solving processes. Nevis (1987) suggests that Gestalt models of consultation essentially are extensions of process consultation, with the addition of a theoretical foundation built on the principles of Gestalt therapy.

BASICS OF GESTALT THEORY

Gestalt psychology began as the study of human perception and learning during the early and mid-Twentieth Century (Koffka, 1922; Kohler, 1929; Wertheimer, 1945). Gestalt principles subsequently were applied in the therapeutic setting (Perls, 1951) and were focused specifically on the processes by which people develop an awareness and perception of their environments at any given moment in time. When Gestalt principles are applied within an organizational-consulting situation, perception and awareness become focal points—so much so that Nevis (1987) argues that the basic premise of Gestalt consulting is that *effective awareness processes are fundamental to any successful intervention.*

Figure/Ground

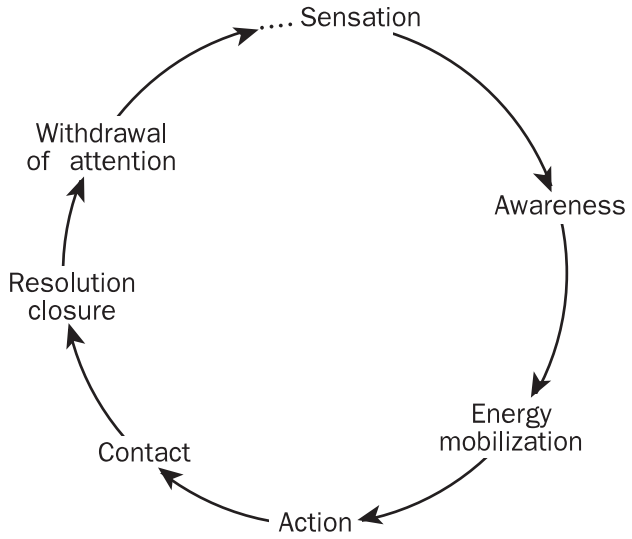
Gestalt pertains to the manner in which parts of environments or situations are perceived and experienced as meaningful wholes. *Figure* is anything within the environment or situation that is the focus of attention, and *ground* is the environment or background surrounding the figure. Ground includes all that is within one's field of perception (physical and emotional) but that is not the focus of attention. Figures exist within *boundaries* that define and separate them from the environment.

The Gestalt Cycle of Awareness

Nevis contends that effective Gestalt consulting requires an understanding of the *Gestalt cycle of awareness.* Its acceptance as a basic orienting principle is an integral part of understanding Gestalt processes. The cycle of awareness addresses the following elements of human experience:

- ***The processes by which people become aware of what is going on in the environment;*** and
- ***The methods by which energy is readied for action.***

The cycle assumes that all people have an intrinsic desire to be effective and to be satisfied with what they do. Gestalt-oriented consultants believe that movement through the cycle is necessary for healthy functioning, human effectiveness, satisfaction, and learning. The figure that follows illustrates the seven stages of the Gestalt cycle of experience*: sensation, awareness, energy mobilization, action, contact, resolution,* and *withdrawal of attention.*



Gestalt Cycle of Experience[*]

- ***Sensation.*** Human experience begins with sensory arousal that is brought about by one or more of the five senses (touch, smell, sight, hearing, and taste). This arousal stems from elements in the environment and leads to an awareness of figures.
- ***Awareness.*** Awareness occurs when figures emerge from sensations. Awareness focuses attention on important elements (figures) within the environment (ground) so that important elements emerge as clearly differentiated figures. Awareness is continuous and ongoing.
- ***Energy Mobilization.*** Energy is the potential or capability to do work. Awareness brings about an awakening of internal energy, which produces the additional strength necessary to bring important background elements into focus (make figural). In the Gestalt sense, energy mobilization refers to the work that takes place in order to produce a clearly differentiated figure and ground.

[*] From E.C. Nevis, *Organizational Consulting: A Gestalt Approach.* New York: Gardner Press, 1987. Used with permission.

- ***Action.*** Action adds a behavioral component to the awareness of an emerged figure. The first three stages of the Gestalt cycle of experience refer to increased sensory awareness of self and/or environment. Thus, action is the joining of awareness, energy, and overt motor behavior in a manner that produces some appropriate action.
- ***Contact.*** Contact is the synthesis of sensory awareness and overt behavior, and pertains to what Nevis (1987) concludes is an "aggressive response to a figure of interest." Contact is active participation with the figure in order to learn about and to unite the desired goal with what is possible. The meaning derived from our experiences is generated through contact.
- ***Resolution.*** Resolution is the acknowledgment of completeness. Through resolution, the meaning of contact is assimilated, and learning occurs. Gestalt uses the term *closure* to signify this completion.
- ***Withdrawal of Attention.*** As closure takes place, attention to the figure declines, and the figure recedes into the background. Work is completed; what has been learned remains available in the background for later use; and sensory processes once again bring new awarenesses into consciousness.

Gestalt Interventions

Gestalt-oriented consultants advocate high-visibility interventions and the use of "self" in *high-contact, client-consultant interaction.* For Nevis, the mere presence of a consultant within a client system affects change within the system. Thus, although the consultant's activity and behavior may be termed contracting, data collection, diagnosis, social interaction, and so on, *any activity or behavior by a consultant is an intervention into the client system.*

A Gestalt model of intervention contends that consultants enter a client system with two primary goals in mind:

- ***To help the client function more effectively;*** and
- ***To maintain a presence within the client system.***

All consultants, regardless of theoretical orientation, work with organizations to help them to become more effective. However, Gestalt-oriented consultants are set apart by their use of the Gestalt cycle of experience. Gestalt consultants typically direct clients' attention in a manner that creates strong awareness of what is happening internally in terms of current functioning and problem-solving capabilities—in particular, the manner in which awareness activates energy and action in specific directions.

The second consulting goal, *maintaining a presence within the client system*, deals with the visible use of "self." *Consultant presence* refers to the consultant's making known his or her personal values, beliefs, attitudes, and skills, and using them to boost client awareness, energy, and action. Presence is *who* the consultant is. Gestalt-oriented

consultants rely on their interactions with clients to bring about awareness and to affect positive change. Therefore, Gestalt consultants are not passive participants within the client system and are receptive to the open expression of personal emotions and perceptions.

According to Nevis, the basic intervention behaviors of Gestalt-oriented consultants are based on the above goals and the Gestalt cycle of experience and include the following:

1. ***Paying attention to, observing, and selectively offering feedback about what has been observed, heard, and perceived within the client system.*** Doing so helps establish the consultant's presence within the client organization.
2. ***Paying attention to one's emotions, thoughts, and sensations, and selectively feeding back that information to the client system.*** Doing so also helps to establish the consultant's presence within the client organization.
3. ***Paying attention to the energy level in the client system and to the development or lack of common focus (figures) for which there is energy.***
4. ***Supporting the development and mobilization of client energy so that action takes place.***
5. ***Facilitating honest, straightforward, and meaningful communication and contact between members of the client system.***
6. ***Helping the client system to achieve an increased awareness of the processes involved in completing organizational tasks so that tasks can be completed in ways that achieve closure around figural issues.***

Behaviors one and two form the essence of Gestalt consulting. The consultant becomes a mirror, giving the client organization an opportunity to view itself from an outsider's perspective. The skilled Gestalt consultant has an array of carefully developed observation and feedback skills that signal the presence of a highly developed self; this is the single most important aspect of Gestalt consulting.

These consulting behaviors are the exact behaviors that the consultant is teaching the client system to perform on its own.

IMPLICATIONS

The Gestalt model of consultation is, for the most part, an extension of traditional process consultation. However, there are major differences, primarily in the use of the Gestalt cycle of experience and in the consultants' reactions and senses of self as issues for consideration. Two important implications are derived from the integration of Gestalt ideologies into the consulting process. The first concerns consultants as part of the client process and suggests that consultants are more than passive participants within client systems. Consultants are, in fact, hypersensitive to client-awareness processes and actively direct clients toward energy mobilization and action. The second implication

concerns the consultant's internal processes while working within the client system. The consultant's job is to help the client system to become more effective, which suggests that consulting services are client driven (as opposed to product driven) and that successful consulting is predicated on adapting the consulting to fit the client.

Finally, in addition to consulting, Gestalt principles have been advocated for use in other organizational aspects such as general managerial behavior (Herman & Korenich, 1977), team building (Karp, 1980), and organization development (Herman, 1974).

REFERENCES

Herman, S.M. (1974). The shadow of organization development. In J.W. Pfeiffer & J.E. Jones (Eds.), *The 1974 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

Herman, S.M., & Korenich, M. (1977). *Authentic management: A Gestalt orientation to organizations and their development.* Reading, MA: Addison-Wesley.

Karp, H.B. (1980). Team building from a Gestalt perspective. In J.W. Pfeiffer & J.E. Jones (Eds.), *The 1980 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

Koffka, K. (1922). Perception: An introduction to Gestalt theory. *Psychological Bulletin, 19,* 531-585.

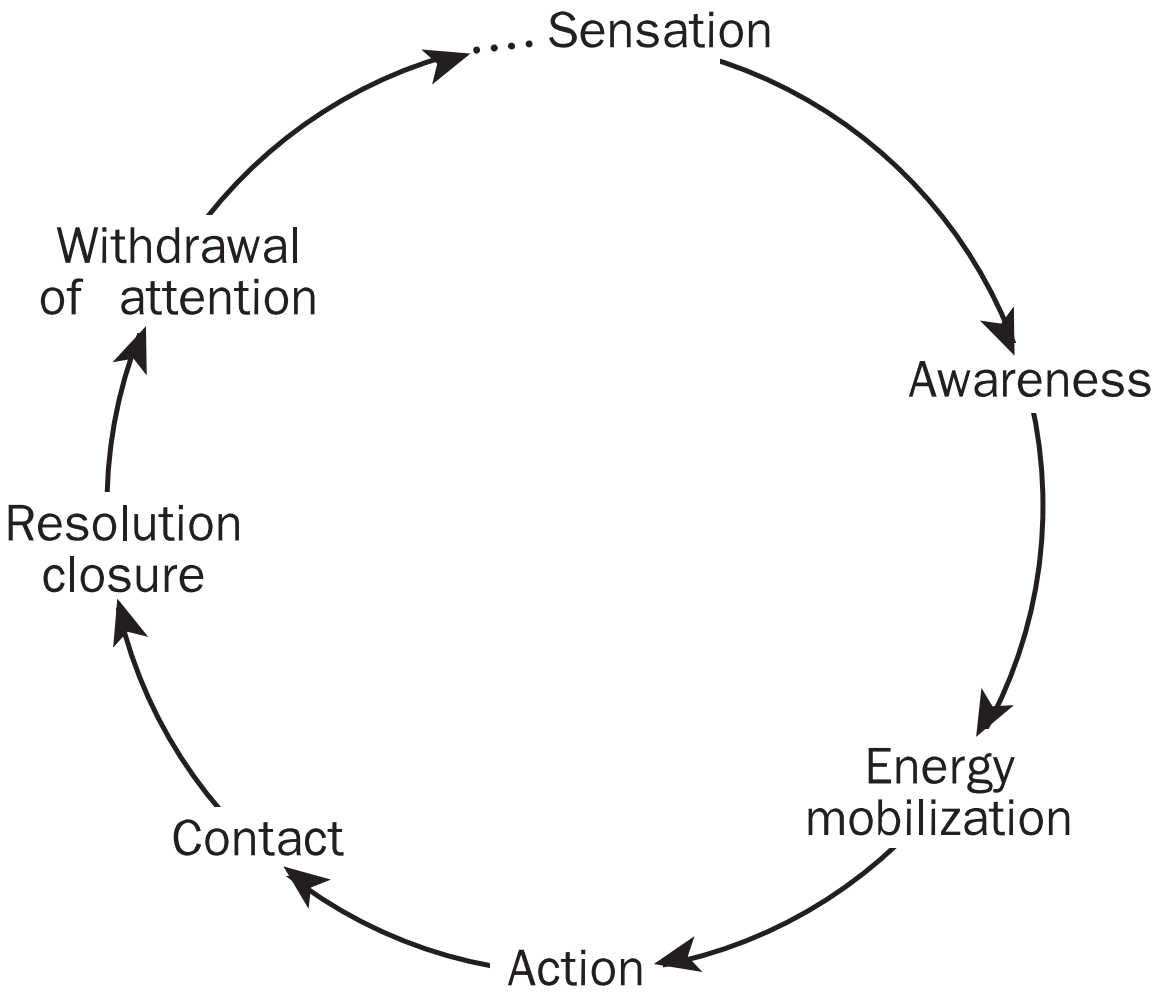
Kohler, W. (1929). *Gestalt psychology.* New York: Liveright.

Nevis, E.C. (1987). *Organizational consulting: A Gestalt approach.* New York: Gardner Press.

Perls, F.S. (1951). *Gestalt therapy.* New York: Dell.

Schein, E.H. (1988). *Process consultation: Its role in organization development* (2nd ed.). Reading, MA: Addison-Wesley.

Wertheimer, M. (1945). *Productive thinking.* New York: Harper.



Gestalt Cycle of Experience

From E.C. Nevis, *Organizational Consulting: A Gestalt Approach.* New York: Gardner Press, 1987. Used with permission.

THE LIPPITTS' CONSULTING MODEL

The conceptualization of consulting processes presented by Lippitt and Lippitt (1986) can provide insight into the behavior of successful, effective consultants. For Lippitt and Lippitt, a consultant's primary job is that of *helper*. As helper, the consultant is called on to suggest and to help implement changes brought about by problems in an organization.

In organizational settings, problems often are related to rapid growth, downsizing, decentralization, improvement of quality, and the like. Undeniably, the effect of rapid technological change has increased the nature and the complexity of organizational problems. Consequently, more and more organizations need helpers to facilitate the integration of the various sources of expertise needed to manage and to resolve problems. Lippitt and Lippitt pointed out that organizations' need for help has accelerated faster than has the education of helpers. Therefore, the need for consultants is greater now than ever before.

As helpers, consultants need to recognize that consulting processes are two-way interactions that take place to help people, groups, organizations, or larger social systems to mesh the external and internal resources necessary to cope with problems. In the helping context, consultants' values, intentions, and behaviors differ significantly from those of leaders, supervisors, or friends. In the context of helping, the consulting process is a collaborative, problem-solving process in which consultants have as much opportunity to learn as do those who are seeking help.

THE CONSULTING PROCESS

Lippitt and Lippitt (1986) identified six consulting phases:

I. ***Engaging in initial contact and entry;***
II. ***Formulating a contract and establishing a helping relationship;***
III. ***Identifying problems through diagnostic analysis;***
IV. ***Setting goals and planning for action;***
V. ***Taking action and cycling feedback;*** and
VI. ***Completing the contract (continuity, support, and termination).***

Each consulting phase is composed of *work focuses* that present the helper with a series of interaction choices and behavioral alternatives. Based on their experiences, Lippitt and Lippitt concluded that the six phases and the fifteen work focuses were appropriate to all types of helping relationships. The following is a brief review of the work focuses of each of the six phases of consulting.

Phase I: Contact and Entry

The interaction choices during phase I involve alternatives available to help givers (consultants) and to help seekers (clients) during their initial meeting. The four work focuses are issues related to *making the first contact, identifying and clarifying needs, exploring the readiness for change efforts,* and *exploring the potential for a positive working relationship.*

- ***Work Focus One: Making the first contact.*** Before any helping relationship can begin, there must be some indication that the potential for such a relationship exists. The initial contact may be made by one of three sources. The potential client (help seeker) may seek consultation because of a perceived need; the potential consultant (help giver) may seek new clients to increase his or her client base or because he or she feels able to help; or a third party may bring the two together.
- ***Work Focus Two: Identifying and clarifying the need for change.*** During the second work focus, the consultant functions as an information gatherer and a co-explorer of the problem. Lippitt and Lippitt hold that it often is a trap to believe that the initial problem as presented by the client is the heart of the issue. Helping clients to probe and to clarify their understanding of the problem gives the consultant a broader perspective of the problem. During this stage, the consultant functions as a listener and as an interviewer. Sometimes, the nature of the difficulty may require the consultant to call attention to ways in which similar types of problems have been resolved.
- ***Work Focus Three: Exploring the readiness for change efforts.*** This is an important step. Any change effort requires work, including changes in behavior and in priorities. The consultant explores the client's ability and willingness to dedicate the time, energy, and committed involvement to appropriate problem-solving processes. Meanwhile, the client explores the consultant's capabilities, sensitivity, credibility, and trustworthiness.
- ***Work Focus Four: Exploring the potential for a positive working relationship.*** Each party explores the potential for developing an effective relationship. According to Lippitt and Lippitt, many consultants consider it important to undergo a period of compatibility testing before committing to a long-term working relationship.

Phase II: Contract

The work focuses of phase I should result in at least tentative decisions on the part of both client and consultant to continue or not to continue the relationship. Should the working relationship continue, an agreement about the nature, objectives, and conditions of the working relationship must be developed. There are three work focuses in phase II.

- ***Work Focus Five: Identifying desired outcomes.*** When formulating the contract, it is not enough to agree that there is a problem and that changes are necessary. To formalize the working relationship, it is important to explore and to understand what outcomes are desirable and whether the desired outcomes are attainable.
- ***Work Focus Six: Determining who should do what.*** Any change requires both consultant and client to commit time and resources. The client needs and deserves to know how much time, energy, and commitment the consultant is willing and able to invest in the relationship. Similarly, the consultant needs and deserves clarification of who within the client system will be involved in the efforts, what kinds of activities are practical, how much support can be expected from the management structure, what financial and time commitments will be made, and how the contract will be terminated. Lippitt and Lippitt asserted that, at this stage, it is critical to determine exactly who the client system really is. It is particularly important to discover whether there are differences between the client and the person or office responsible for paying the bills.
- ***Work Focus Seven: Clarifying time perspective and accountability.*** Another part of formulating the contract includes establishing the time allowed to accomplish the desired outcomes and the evaluation procedures that will be used to assess progress. The time frame may include agreements about milestones at which the progress of the working relationship will be reviewed and at which a decision to continue or to terminate the relationship will be made.

Phase III: Problem Analysis

The processes of contact and entry and contracting involve preliminary assessments of the presenting problem, the readiness for change, and the dynamics of the working relationship. The preliminary assessment provides a foundation for detailed diagnostic work and planning.

- ***Work Focus Eight: Using force-field analysis.*** Force-field analysis is a means of identifying the forces that inhibit and assist movement toward a goal (Spier, 1973). The client system may have trouble providing the consultant with the requested data and staff involvement. During this work focus, the consultant must be sensitive to data-collection efforts. Often, the consultant will be required to help clients to interpret and understand the causes of problems and the implications of change.

Phase IV: Goal Setting and Action Planning

Good assessment methods should equip the client and consultant with a solid foundation for productive goal setting. A good goal-setting process includes a step-by-step description of the work that is required to reach the goal.

- ***Work Focus Nine: Projecting goals.*** Having gained a picture of the problem situation from phases I through III, the client is ready to look ahead. To set meaningful goals, both the client and the consultant must have clear pictures of their ideal and their acceptable outcomes. These pictures provide the bases for planning.
- ***Work Focus Ten: Planning for action and involvement.*** When planning the implementation of meaningful goals, the key to success is to identify what is to be done in a carefully developed, logical sequence of steps. Criteria for accomplishment must be established so that clients will know whether they are on the right track or whether the direction must be changed. The criteria also should provide a basis for celebrating success, which keeps motivation alive. Lippitt and Lippitt believe that one of the most critical and often-neglected phases of the planning process is *anticipatory rehearsal.* This helps to answer questions about *who* from the client system should be involved and *how* they should be involved to increase the probability of success. This sets up new planning sequences and new goals that focus on involvement strategies.

Phase V: Action and Feedback

The rewards of consulting lie in successful action and in the permanence of longterm gains after initial bursts of energy have been expended. There are three work focuses in the crucial implementation phase.

- ***Work Focus Eleven: Taking successful action.*** In this fifth phase of consulting, the consultant is responsible for helping people to develop the skills necessary for success. The consultant must support the celebration of small successes, because these small victories are the primary motivators for continuing the change efforts. The effective consultant also works with key parts of the client system to coordinate multiple activities and involvements.
- ***Work Focus Twelve: Evaluating and guiding feedback.*** During the action phase, it is crucial that the consultant use appropriate procedures to elicit feedback about progress and to involve the necessary people in feedback assessment. This continuing assessment can save more dollars, hours, and energy than any other helping action.
- ***Work Focus Thirteen: Revising action and mobilizing additional resources.*** Feedback is helpful only if it is used in a timely manner to re-evaluate goals, to revise action strategies, and perhaps to prompt decisions concerning the mobilization of additional resources and changes in assignments and roles.

Completion

Many consulting efforts appear successful at first, but the resulting changes soon succumb to one of three common hazards: (a) they are *short-term,* as people and systems

regress to old habits; (b) they are *fragile* and cannot be maintained; or (c) they are met with *counterreactions* that must be coped with quickly in order for the changes to be maintained. Many consultation designs do not contain provisions for follow-up support or for gradual termination of the consultant's services.

- ***Work Focus Fourteen: Designing continuity supports.*** According to Lippitt and Lippitt, the design of support systems to maintain the change efforts is the most significant test of a consultant's competence. Sometimes the result of this effort is a plan for a continuing review of events, including and involving a wide sampling of personnel from the client system.
- ***Work Focus Fifteen: Establishing termination plans.*** The goal of most consultants is to become progressively unnecessary. Consultants design and plan for this in a number of ways, including: (a) training an organizational insider to take over the consulting function; (b) setting a series of dates for decreasing the consultant's involvement; (c) planning a termination celebration after the final goal of a collaborative effort is reached; and (d) establishing a periodic maintenance plan such as an annual review session. Every consulting relationship must have some plan for a healthy, mutually satisfying termination of the client-consultant relationship. Established early, this plan can help to guide many intervention decisions during the consultation.

Lippitt and Lippitt asserted that the consulting phases and work focuses described above are universally applicable and are useful for helping external and internal consultants to clarify and to guide their intervention decisions.

REFERENCE

Spier, M.S. (1973). Kurt Lewin's force field analysis. In J.E. Jones & J.W. Pfeiffer (Eds.), *The 1973 annual handbook for group facilitators.* San Diego, CA: Pfeiffer & Company.

SOURCE

Lippitt, G., & Lippitt, R. (1986). *The consulting process in action* (2nd ed.). San Diego, CA: Pfeiffer & Company.

I. Engaging in initial contact and entry;

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Lippitt and Lippitt's Six Phases of Consulting

THE ORGANIZATION-DEVELOPMENT CUBE

The term *organization development* (OD) encompasses many different activities that can be used to improve the functioning of an organization. Schmuck and Miles (1971) developed a scheme called the *OD cube* that represents the options available for OD interventions. The OD cube is pictured in the figure on the next page.

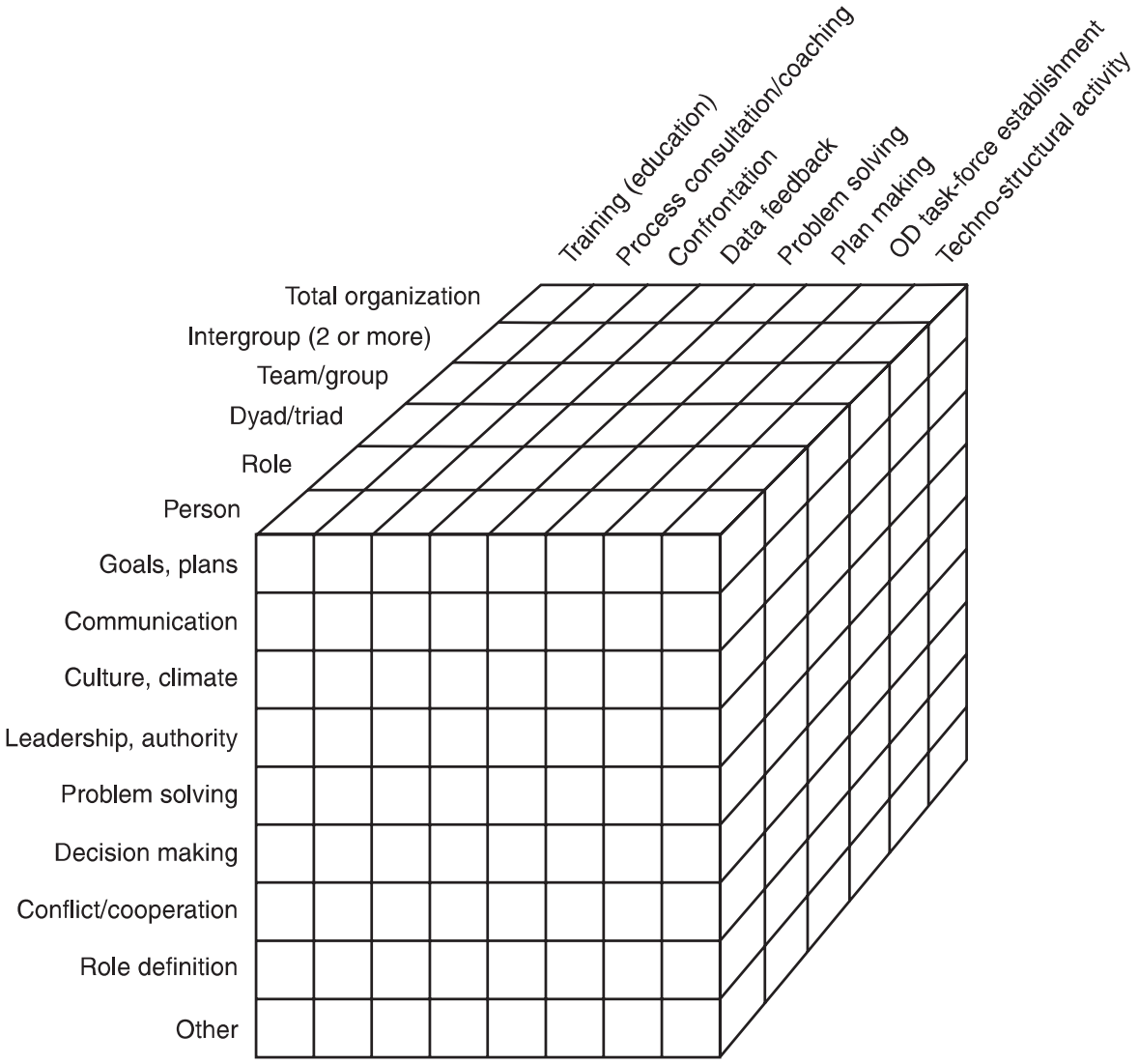
Along the left edge of the cube are problems diagnosed by the change team; these include difficulties in goal setting and in planning, communication, climate, and so on. These problems may occur either in existing units or in units created during the start-up phase of a new organization, during the course of mergers with or acquisitions of other organizations, or during a major reorganization.

The diagonal edge of the cube represents the focus of attention of the forthcoming intervention. The intervention may be focused on changes in personnel (individuals), in roles, in dyads or triads (two- or three-person groups), in work teams, in the relations between two or more groups, or in the organization as a whole. Organization development most frequently focuses on key roles, on teams, on relationships between groups, and on the entire organization.

THE INTERVENTIONS

The modes of intervention that can be employed are as follows:

1. ***Training or Education:*** procedures involving teaching or experience-based learning, such as lectures, structured activities and exercises, simulations, and T-groups.
2. ***Process Consultation:*** observing ongoing processes and coaching to improve them.
3. ***Confrontation:*** bringing together units of the organization (people, roles, or groups) that previously have had poor communication; usually accompanied by supporting data.
4. ***Data Feedback:*** systematic collection of information, which then is reported back to appropriate organizational units as a base for diagnosis, problem solving, and planning.
5. ***Problem Solving:*** meetings focusing on problem identification, diagnosis, generation of solutions, and implementation.
6. ***Planning:*** planning and goal-setting activities to plot the organization's future.



The OD Cube: A Scheme for Classifying OD Interventions[*]

7. ***OD Task-Force Establishment:*** setting up *ad hoc* problem-solving groups or internal teams of specialists to ensure that the organization solves problems and carries out plans continually.
8. ***Techno-Structural Activity:*** action that has as its primary focus the alteration of the organization's structure, work flow, and ways of accomplishing tasks.

[*] Reproduced from A.A. Schmuck and M.B. Miles, *OD in Schools.* San Diego, CA: Pfeiffer & Company, 1971. Adapted from French and Bell (1978).

USES AND IMPLICATIONS OF THE OD CUBE

These intervention modes flow into one another and are not mutually exclusive. They range from "soft" (person-changing) to "hard" (task-oriented or structure-changing) in emphasis. A strong OD program typically will involve all eight components at one time or another.

Any OD intervention can be classified according to its problem, its focus of attention, and its mode of intervention. For example, an intervention might be aimed at increasing an existing team's problem-solving and decision-making skills. Its mode might be process consultation: The outside change agent observes the group and provides feedback from time to time on its process (how it proceeds, who is and is not listened to, whether the boss's word always is law, and so on). In another example, an OD intervention might focus on the faculty of a new junior high school to increase the faculty's ability to solve problems. The modes of the intervention could be communication-skills training, followed by problem-solving training, and then by process consultation during actual problem solving in faculty meetings.

As the latter example indicates, the OD process is complicated by the fact that most interventions sequence various modes in unique ways. As one considers the complexities of OD design, the number of combinations involving all three dimensions becomes very large. As yet, research tells us little about the best ways to sequence interventions that are directed toward specific targets and problems over a period of years, but such strategic planning is the central stock-in-trade of the OD specialist.

SOURCE

Schmuck, R.A., & Miles, M.B. (1971). *Organization development in schools.* San Diego, CA: Pfeiffer & Company.

TYPES OF ORGANIZATIONAL CONSULTING

The Random House College Dictionary defines *consulting* as "the giving of professional or expert advice." In an organizational context, consulting is the label given to a variety of advice-giving activities aimed at improving the overall effectiveness of an organization, its members, and its systems and subsystems. Organizational-consulting activities are performed by both *internal staff members* and *external consultants* who have been authorized to give advice regarding organizational problems. Users of consulting services usually are referred to as *clients.* Schein (1987) has described three distinct types of consultant-client interaction that are applicable to organizational settings; these models are known as *purchase, doctor-patient,* and *process consultation.*

PURCHASE

Schein's purchase model of organizational consultation refers to the buying of expert information or technical services and focuses on *content*—the "what" of a problem. Purchase models are most effective when:

- ***The client knows what the problem is and how it should be fixed;***
- ***The appropriate consultant has been chosen to fix the problem;***
- ***The consequences of fixing the problem have been well thought out;*** and
- ***The problem has been described accurately to the consultant.***

The consultant's task in the purchase model is to fix the identified problem by providing expert information or services. The most frequently purchased types of consulting are *education and training* and *program consultation.*

Education and Training

Consultants who specialize in education and training provide information. This is the most common consulting function. As an educator and a trainer, the consultant acts as an expert "pair of hands" (Block, 1981) and communicates information to those whom the client has determined need to know. Education and training services are information intensive and emphasize the presentation of images, concepts, ideas, and skills by means of lectures, audiovisual and printed materials, structured experiences, small-group discussions, behavioral modeling, feedback, and so on. Examples of consultant-provided education and training services include public-relations efforts, workshops, staff development, and in-service training. The client's primary task is to learn; he or she is not obligated to make use of the learnings.

To be effective, education-and-training consultants must understand and demonstrate competence in:

- ***Assessing educational and training needs;***
- ***Developing measurable training objectives;***
- ***Planning and designing learning events;***
- ***Using multimedia learning aids;*** and
- ***Helping others to learn.***

Program Consultation

Like education-and-training consultants, program consultants provide information; in addition, program consultants serve as expert technical advisors. Program consulting is information intensive, but the emphasis is on providing technical assistance or advice in areas related to a specific program. Examples of consultant-supplied technical assistance include program planning, changes and revisions to existing programs, and program evaluation. During program consultation, the client's primary role is to provide and to allow access to program-related information.

To be effective, program consultants must understand and demonstrate competence in:

- ***A technical specialty;***
- ***Developing objectives;***
- ***Collecting and evaluating data;***
- ***Making program decisions;*** and
- ***Writing proposals.***

DOCTOR-PATIENT

The doctor-patient model also involves the purchase of expert information or technical services. However, rather than purchasing expertise in order to *fix* a problem, the client (patient) purchases a consultant's (doctor's) expertise in *diagnosis and prescription.* In other words, the client knows that something is wrong but does not know what it is or how to fix it. Doctor-patient models assume that:

- Diagnosis will be regarded as helpful by everyone in the client system;
- The identified sick area(s) will provide the information needed to make an accurate diagnosis;
- The client will implement the prescribed "cure"; and
- The patient will function effectively after the doctor leaves.

The consultant's task is to identify what is wrong and how it should be treated (to define the problem and to recommend a solution). The client's task is to be a good patient and to follow the prescribed "treatment." To be effective in this model, consultants must be competent in:

- ***Organizational diagnosis;***
- ***Organizational theory;***
- ***The ability to assess organizations;***
- ***Data collection and interpretation;*** and
- ***Interpersonal communication.***

PROCESS CONSULTATION

In both the purchase and the doctor-patient models, the focus is on the *content* of the problem situations. The client purchases expertise either in fixing or in identifying a problem. The process-consultation model is distinctly different in that it focuses on process—*how* a problem is solved. In other words, the client knows that something is wrong and purchases help in figuring out what the problem is and how to fix it. Thus, the client buys the expertise of a *facilitator and catalyst.* The consultant assumes the role of *active collaborator* whose strategic goal is to help the client system to supplement its internal problem-solving capabilities in the areas of diagnosing and identifying problems, developing action alternatives, and self-renewal.

Process-consultation models assume that:

- Organizations are networks of people;
- The client is distressed and does not know the source of the problem;
- The client is motivated by goals and values and has the capacity to enter into a constructive relationship;
- The client does not know what kind of help is needed;
- The client is the only one who knows what will work best;
- The client needs help in figuring out the problem and would benefit from participation in diagnostic processes; and
- The client is capable of learning to diagnose and to solve problems internally.

Implicit in the process-consultation model is a fundamental assumption that client problems primarily involve human processes and interactions. In this model, the consultant serves as a resource to help identify the human processes and interactions that inhibit the client's problem-solving abilities. To be effective, process consultants must demonstrate competence in:

- ***Individual processes;***

- ***Interpersonal processes;***
- ***Group processes;*** and
- ***Intergroup processes.***

Process consultation works best when the client system possesses some problem-solving skills and aspires to learn how to reach solutions. The operative concept is *client involvement* as a means of minimizing client dependency and of avoiding the potential resistances, power struggles, and resentment that at times characterize the purchase and the doctor-patient relationships.

REFERENCES

Block, P. (1981). *Flawless consulting: A guide to getting your expertise used.* San Diego, CA: Pfeiffer & Company.

Schein, E.H. (1988). *Process consultation: Its role in organization development* (2nd ed.). Reading, MA: Addison-Wesley.

1. Purchase
   - Education and Training
   - Program
2. Doctor-Patient
3. Process

Types of
Organizational Consulting