

CASES & APPLICATIONS

ORGANIZATION

THEORY

Richard L. Daft Kristen D. Skivington Mark P. Sharfman

Second Edition

CASES AND APPLICATIONS

Organization Theory

SECOND EDITION

Richard L. Daft
TEXAS A&M

Kristen D. Skivington
MICHIGAN STATE UNIVERSITY

Mark P. Sharfman
PENNSYLVANIA STATE UNIVERSITY

West Publishing Company
ST. PAUL NEW YORK LOS ANGELES SAN FRANCISCO

Art: Rolin Graphics
Cover Design: Peter Thiel

COPYRIGHT © 1984 By WEST PUBLISHING COMPANY
COPYRIGHT © 1987 By WEST PUBLISHING COMPANY
50 W. Kellogg Boulevard
P.O. Box 64526
St. Paul, MN 55164-1003

All rights reserved

Printed in the United States of America

Library of Congress Cataloging in
Publication Data

ISBN: 0-314-28488-5

1st Reprint—1987



Preface

The purpose of this book is to provide a set of organization theory cases and exercises that are theoretically relevant and meaningful in application. As an academic discipline, organization theory concepts pertain to everyday management problem solving and decision making. The challenge facing organization theory instructors is to teach theoretical concepts and also to show how these concepts can be used in practical application. From our own teaching experience, challenging case problems can make the difference between a good organization theory course and a great one. The goal of this book is to provide supplementary case material that is both interesting and practical and that will help students become more competent and more informed about organizations. The second edition helps translate organization theory concepts into relevant applications by including cases which have the following features.

1. The second edition contains more than 40 percent new material, and several of the carryover cases have been updated. Because the field of organization theory changes rapidly, it is essential that the materials be fresh. With the development of new organizational forms and even new industries, the cases and exercises were selected to reflect this evolution.
2. There is more emphasis on "problem-oriented" cases in this edition. This means that several of the cases are longer, and the student has the opportunity to see theoretical issues revealed in less than ideal ways. Students then have the opportunity to diagnose problems, suggest alternatives, and recommend solutions. The student gets to grapple with the issues in much the same way as a manager in industry. The problem-oriented cases are excellent vehicles for group projects that let students apply what they have learned.
3. The cases cover the breadth of organization theory topics, especially topics that have emerged in recent years. Several cases pertain to traditional topics such as environment, bureaucracy, technology, and structure. New cases have been included to reflect emerging issues in organizations, such as management information systems and corporate culture.

Cases also address high technology industries such as aerospace, bioengineering, computers, and telecommunications. Cases have been included to reflect the rise in the service sector, and cases also cover broader issues such as corporate social responsibility, government/business relationships, and retrenchment.

4. Cases were selected because of their high interest level for students. The cases represent real people in real organizations. They are not fictional and are not written from secondary material. A major criterion for selection was that they be well written and enjoyable to read. Most of the cases have been classroom tested on students.
5. Several improvements have been made in the experiential exercises. Feedback from users of the first edition indicated difficulty in using some of the exercises. A great deal of effort has been put into the design of the student exercises to ensure that they are meaningful and that the instructions are clear. Some of the new exercises could actually do double duty. They are interesting as classroom activities and can also be modified and used for diagnosis or training in organizations.
6. The Instructor's Manual has been changed to provide more information to instructors. For some cases, material included in the Instructor's Manual provides a recent update on the status of the company. Discussion questions for each case have been added to the Manual for instructors who like to use questions to focus student preparation for class discussion. The topic matrix has been included in the Instructor's Manual but not in the casebook itself. A complexity scale has been added to indicate the complexity of each case. These changes, in addition to the substantive discussion of each case and exercise, makes the Manual more helpful for instructors.

ACKNOWLEDGMENTS

This book, like most books, reflects the ideas and hard work of a number of people. First and foremost, we would like to thank the case authors. They studied organizations, wrote the cases, and gave us permission to use their work. We would also like to thank the publishers who granted us permission to use their previously published materials.

We also extend appreciation to administrators and colleagues at Texas A&M and Penn State University who were helpful and supportive during development of the second edition. Michael Hitt, Management Department Head, and Bill Mobley, Dean of the College of Business at Texas A&M, and Charles Snow, Management Department Head, and Eugene Kelly, Dean of the College of Business Administration at Penn State, have created excellent climates for research of all sorts, and have provided many of the resources for this project. Several colleagues at Texas A&M and Penn State have provided assistance and intellectual stimulation along the way. We especially thank Jim Dean, Barbara Gray, Don Hellriegel, and Jim Skivington. Special recognition must go to the individuals who gave us painstaking reviews of the first edition. Their assistance made the creation of the new edition far easier. Many thanks to Robert Allison of Wayne State, John Clarry of Penn State, Larry French from University of Texas-Arlington, William Ickinger of Tulane, Carol Sales of Brock University, and Jim Swenson of Moorehead State.

For assistance with typing, permissions, and hundreds of other details we are especially grateful to Laura Frye, Shirley Rider, Diane Snyder, and Phyllis Washburn.

We also thank the editors at West. Esther Craig and Dick Fenton were, as usual, extraordinary. Jean Cook in production and Beth Kennedy in marketing also were extremely helpful. Without the collective tolerance, encouragement and assistance

from the staff at West this edition would not have been completed.

Our final note of appreciation goes to the professors and students who used the first edition. We have created this new volume for you. It is our hope that this edition has furthered the original goal of making the concepts and discoveries of organization theory available to students and practition-

ers through the teaching process. The comments, support, and interest in the first edition showed us there was a demand for a supplementary casebook, and in some ways this book was meeting that demand.

R.L.D.

M.S.

K.D.S.

A General Diagnostic Model for Organizational Behavior: Applying a Congruence Perspective

Most of the job of management is the struggle to make organizations function effectively. The work of society gets done through organizations, and the function of management is to get those organizations to perform that work.

The task of getting organizations to function effectively is a difficult one, however. Understanding one individual's behavior is a challenging problem in and of itself. A group, made up of different individuals and multiple relationships among those individuals is even more complex. Imagine, then, the mind boggling complexity inherent in a large organization made up of thousands of individuals, hundreds of groups, and relationships among individuals and groups too numerous to count.

In the face of this overwhelming complexity, organizational behavior must be managed. Ultimately the work of organizations gets done through the behavior of people, individually or collectively, on their own or in collaboration with technology. Thus, central to the management task is the

management of organizational behavior. To do this, there must be the capacity to *understand* the patterns of behavior at individual, group and organizational levels, to *predict* what behavioral responses will be elicited by different managerial actions, and finally to use understanding and prediction to achieve *control*.

How can one achieve understanding, prediction, and control of organizational behavior? Given its inherent complexity and enigmatic nature, one needs tools to help unravel the mysteries, paradoxes, and apparent contradictions that present themselves in the everyday life of organizations. One kind of tool is the conceptual framework or model. A model is a theory which indicates which factors (in an organization, for example) are most critical or important. It also indicates how these factors are related, or which factors or combination of factors cause other factors to change. In a sense, then, a model is a roadmap that can be used to make sense of the terrain of organizational behavior.

Source: Written by David A. Nadler and Michael L. Tushman. Published by permission of the authors, who retain all rights. A version of this paper was originally published in J. R. Hackman, E. E. Lawler, and L. W. Porter (eds.), *Perspectives on Behavior in Organizations* (New York: McGraw-Hill, 1977).

The models we use are critical because they guide our analysis and action. In any organizational situation, problem solving involves the collection of information about the problem, the interpretation of that information to determine specific problem types and causes, and the development of action plans. The models that individuals hold influence what data they collect and what data they ignore; models guide how people attempt to analyze or interpret the data they have; finally models aid people in choosing action plans.

Indeed, anyone who has been exposed to an organization already has some sort of implicit model. People develop these roadmaps over time, building on their own experiences. These implicit models (they usually are not explicitly written down or stated) guide behavior (Argyris & Schon, 1974). These models also vary in quality, validity, and sophistication depending on the nature and extent of the experiences of the model builder, his or her perceptiveness, his/her ability to conceptualize and generalize from experiences, etc.

We are not solely dependent, however, on the implicit and experience based models that individuals develop. The last four decades have witnessed intense work including research and theory development related to organization behavior (see, for example, Dunnette, 1976). It is therefore possible to think about scientifically developed explicit models for the analysis of organizational behavior and for use in organizational problem solving.

This paper will present one particular research and theory based model. It is a general model of organizations. Rather than describing a specific phenomenon or aspect of organizational life (such as a model of motivation or a model of organizational design) it attempts to provide a framework for thinking about the organization as a total system. The major thrust of the model is that for organizations to be effective, their subparts or components

must be consistently structured and managed—they must approach a state of congruence.

The paper will be organized into several sections. In the first section we will discuss the basic view of organizations which underlies the model—systems theory. In the second section we will present and discuss the model itself. In the third section, we will present an approach to using the model for organizational problem analysis. Finally, we will discuss some of the implications of this model for thinking about organizations.

A BASIC VIEW OF ORGANIZATIONS

There are many different ways of thinking about organizations. Typically when a manager is asked to "draw a picture of an organization" he/she responds with some version of a pyramidal organizational chart. The model this rendition reflects is one which views the most critical factors as the stable formal relationships among the jobs and formal work units that make up the organization. While this clearly is one way to think about organizations, it is a very limited view. It excludes factors such as leader behavior, the impact of the environment, informal relations, power distribution, etc. Such a model can only capture a small part of what goes on in an organization. It is narrow and static in perspective.

Over the past twenty years there has been a growing consensus that a viable alternative to the static classical models of organizations is to think about organizations as social systems. This approach stems from the observation that social phenomena display many of the characteristics of natural or mechanical systems (Von Bertalanffy, 1968, Buckley, 1967). In particular it is argued that organizations can be better understood if they are considered as dynamic and open social systems (Katz & Kahn, 1966; 1978).

What is a system? In the simplest of

terms, a system is a set of interrelated elements. These elements are related; thus change in one element may lead to changes in other elements. An *open system* is one that interacts with its environment. Thus it is more than just a set of interrelated elements. Rather, these elements make up a mechanism that takes input from the environment, subjects it to some form of transformation process, and produces output (Exhibit 1). At the most general level, it should be easy to visualize organizations as systems. Let's consider a manufacturing plant, for example. It is made up of different related components (different departments, jobs, technologies, etc.). It receives input from the environment, including labor, raw material, production orders, etc., and subjects those inputs to a transformation process to produce products.

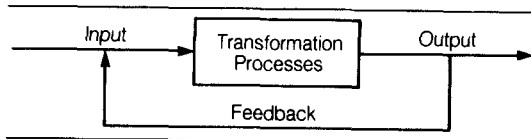
Organizations as systems display a number of basic systems characteristics. Katz and Kahn (1966; 1978) discuss these in detail, but a few of the most critical characteristics will be mentioned here. First, organizations display degrees of internal *interdependence* (Thompson, 1967). Changes in one component or subpart of an organization frequently has repercussions for other parts—the pieces are interconnected. Returning to our manufacturing plant example, if changes are made in one element (for example, the skill levels of the people hired to do jobs), other elements will be affected (the productiveness of equipment used, the speed or quality of production activities, the nature of supervision needed, etc.). Second, organizations have the capacity for *feedback* (see Exhibit 1). Feedback is information about the output of a system that can be used to control the system (Weiner,

1950). Organizations can correct errors and indeed change themselves because of this characteristic (Bauer, 1966). If, in our plant example, the plant management receives information about the declining quality of its product, it can use this information to identify factors in the system itself that contribute to this problem. It is important to note that, unlike mechanized systems, feedback information does not always lead to correction. Organizations have the potential to use feedback and be self-correcting systems, but they do not always realize this potential.

A third characteristic of organizations as systems is *equilibrium*. Organizations develop energy to move towards states of balance. When an event occurs that puts the system out of balance, it reacts and moves towards a balanced state. If one work group in our plant example were suddenly to increase its performance dramatically, it would throw the system out of balance. This group would be making increasing demands on the groups that supply it with information or materials to give it what it needs. Similarly, groups that work with the output of the high performing group would feel the pressure of work in process inventory piling up in front of them. Depending on the pay system used, other groups might feel inequity as this one group begins to earn more. We would predict that some actions would be taken to put the system back into balance. Either the rest of the plant would be changed to increase production and thus be back in balance with the single group, or (more likely) actions would be taken to get this group to modify its behavior to be consistent with the levels of performance of the rest of the system (by removing workers, limiting supplies, etc.). The point is that somehow the system would develop energy to move back towards a state of equilibrium or balance.

Fourth, open systems display *equifinality*. In other words, different system configura-

EXHIBIT 1 THE BASIC SYSTEMS MODEL



tions can lead to the same end or lead to the same type of input-output conversion. This means there is not a universal or "one best way" to organize. Finally, open systems need to display *adaptation*. For a system to survive it must maintain a favorable balance of input or output transactions with the environment or it will run down. If our plant produces a product for which there are decreasing applications, it must adapt to the environmental changes and develop new products or ultimately the plant will simply have to close its doors. Any system therefore must adapt by changing as environmental conditions change. The consequences of not adapting to the environment can be seen in the demise of many once prosperous organizations (such as the eastern railroads) which did not alter in response to environmental changes.

Thus systems theory provides a different way of thinking about the organization, in more complex and dynamic terms. While systems theory is a valuable basic perspective on organizations, it is limited as a problem solving tool. The reason is that as a model systems theory is too abstract to be used for day to day organizational behavior problem analysis. Because of the level of abstraction of systems theory, we need to develop a more specific and pragmatic model based on the concepts of the open systems paradigm.

A CONGRUENCE MODEL OF ORGANIZATIONAL BEHAVIOR

Given the level of abstraction of open systems theory, our job is to develop a model which reflects the basic systems concepts and characteristics, but which will also be more specific and thus more usable as an analytic tool. In this section, we will describe a model which attempts to specify in more detail what are the critical inputs, what are the major outputs, and what are the transformation processes that characterize organizational functioning.

The model puts its greatest emphasis on the transformation process and in particular reflects the critical system property of interdependence. It views organizations as made up of components or parts which interact with each other. These components exist in states of relative balance, consistency, or "fit" with each other. The different parts of an organization can fit well together and thus function effectively, or fit poorly, thus leading to problems, dysfunctions, or performance below potential. Given the central nature of these "fits" among components in the model, we will talk about it as a *congruence model of organizational behavior*, since effectiveness is a function of the congruence among the various components.

The concept of congruence is not a new one. Homans (1952) in his pioneering work on social processes in organizations emphasized the interaction and consistency among key elements of organizational behavior. Leavitt (1965) for example identified four major components of organization as being people, tasks, technology and structure. The model we will present here builds on these views and also draws from fit models developed and used by Seiler (1967), Lawrence and Lorsch (1969) and Lorsch & Sheldon (1972).

It is important to remember that we are concerned about modeling the *behavioral* system of the organization—the system of elements that ultimately produce patterns of behavior and thus performance of the organization. In its simplest form we need to deal with the questions of what inputs does the system have to work with, what outputs does it need to and actually produce, and what are the major components of the transformation process, and how do these components interact with each other.

Inputs

Inputs are those factors that are, at any one point in time, the "givens" that face the

organization. They are the material that the organization has to work with. There are several different types of inputs, each of which presents a different set of "givens" to the organization. (See Exhibit 2 for an overview of inputs.)

The first input is the *environment*, or all of those factors outside of the boundaries of the organization being examined. Every organization exists within the context of a larger environment which includes individuals, groups, other organizations and even larger social forces, all of which have a potentially powerful impact on how the organization performs (Pfeffer & Salancik, 1978). Specifically, the environment includes markets (clients or customers), suppliers, governmental and regulatory bodies, labor unions, competitors, financial institutions, special interest groups, etc. The environment is critical to organizational functioning (Aldrich & Pfeffer, 1976). In

particular, for purposes of organizational analysis, the environment has three critical features. First, the environment makes demands on the organization. For example, it may require the provision of certain products or services, at certain levels of quality or quantity. Market pressures are particularly important here. Second, the environment may place constraints on organizational action. It may limit the types of kinds of activities in which an organization can engage. These constraints could range from limitations imposed by scarce capital, all the way to governmental regulatory prohibitions. Third, the environment provides opportunities which the organization can explore. In total, then, the analysis of an organization needs to consider what factors are present in the environment of the organization, and how those factors individually or in relation to each other create demands, constraints, or opportunities.

EXHIBIT 2 KEY ORGANIZATIONAL INPUTS

Input	Environment	Resources	History	Strategy
DEFINITION	All factors, including institutions, groups, individuals, events, etc. outside of the boundaries of the organization being analyzed, but having a potential impact on that organization.	Various assets that organization has access to, including human resources, technology, capital, information, etc. as well as less tangible resources (recognition in the market, etc.).	The patterns of past behavior, activity, and effectiveness of the organization which may have an effect on current organizational functioning.	The stream of decisions made about how organizational resources will be configured against the demands, constraints and opportunities, within the context of history.
CRITICAL FEATURES OF THE INPUT FOR ANALYSIS	<ul style="list-style-type: none"> What demands does the environment make on the organization? Environment puts constraints on organizational action. 	<ul style="list-style-type: none"> What is the relative quality of the different resources that the organization has access to? To what extent are resources fixed, as opposed to flexible in their configuration? 	<ul style="list-style-type: none"> What have been the major stages or phases of development of the organization? What is the current impact of historical factors such as strategic decisions acts of key leaders crises core values & norms? 	<ul style="list-style-type: none"> How has the organization defined its core mission, including: <ul style="list-style-type: none"> What markets it serves What products/ services it provides to these markets On what basis does it compete What supporting strategies has the organization employed to achieve the core mission What specific objectives have been set for organizational output?

The second input is the *resources* of the organization. Any organization faces its environment with a range of different assets to which it has access and which it can employ. These include human beings, technology, capital, information, etc. Resources can also include certain less tangible assets such as the perception of the organization in the marketplace, or a positive organizational climate. A set of resources can be shaped, deployed, or configured in different ways by an organization. For analysis purposes, there are two features that are of primary interest. One aspect of resources concerns the relative quality of those resources, or what value they have in light of the nature of the environment. The second factor concerns the extent to which resources can be reconfigured, or how fixed or flexible different resources are.

The third input is the *history* of the organization. There is growing evidence that the contemporary functioning of many organizations is greatly influenced by events in the past (see Levinson, 1972; 1976). In particular, it is important to understand what have been the major stages or phases of development of the organization over time (Galbraith & Nathanson, 1978) as well as understanding what is the current impact of events that occurred in the past such as key strategic decisions that were made, the acts or behavior of key leaders in the past, the nature of past crises and the organizational responses to them, and the evolution of core values and norms of the organization.

The final input is somewhat different from the others in that it in some ways reflects some of the factors in the environment, resources, and history of the organization. The fourth input is *strategy*. We will use this term in its most global and broad context (Hofer & Schendel, 1978) to describe the whole set of decisions that are made about how the organization will configure its resources against the demands, constraints and opportunities of the environ-

ment within the context of its history. Strategy refers to the issue of matching the organization's resources to its environment, or making the fundamental decision of "what business are we in?" For analysis purposes, several aspects of strategy are important to identify (Katz, 1970). First is what is the core mission of the organization, or what has the organization defined as its basic purpose or function within the larger system or environment? The core mission includes decisions about what markets the organization will serve, what products or services it will provide to those markets, or what basis it will use to compete in those markets. Second, strategy includes the specific supporting strategies (or tactics) that the organization will employ or is employing to achieve its core mission. Third is the specific performance or output objectives that have been established.

Strategy is perhaps the most important single input for the organization (see discussion in Nadler, Hackman & Lawler, 1979). On one hand, strategic decisions implicitly determine what is the nature of the work that the organization should be doing, or the tasks that it should perform. On the other hand, strategic decisions, and particularly decisions about objectives, serve as the basis for determining what the outputs of the system should be. Based on strategy, one can determine what is the desired or intended output of the system.

In summary, there are three basic inputs: environment, resources, and history, and a fourth input, strategy, which reflects how the organization chooses to respond to or deal with those other inputs. Strategy is critical because it determines the work that the organization should be performing and it defines the nature of desired organizational outputs.

Outputs

Outputs describe what the organization produces, how it performs, or globally,

how effective it is. There has been a lot of discussion about what makes for an effective organization (see Steers, 1978; Goodman & Pennings, 1978; Van de Ven & Ferry, 1980). For our purposes, however, it is possible to identify a number of key indicators of organizational output. First, we need to think about system output at different levels (see Exhibit 3). Obviously we can think about the output that the system itself produces, but we also need to think about the various other types of output that contribute to organizational performance, such as the functioning of groups or units within the organization as well as the functioning of individual organization members.

At the organizational level, three factors are important to keep in mind in evaluating organizational performance. The first factor is goal attainment, or how well the organization meets its objectives (usually determined by strategy). A second factor is resource utilization or how well the organization makes use of resources that it has available to it. The question here is not just whether the organization meets its goals but whether it realizes all of the potential performance that is there and whether it achieves its goals by continuing to build resources or by "burning them up" in the process. A final factor is adaptability, or whether the organization continues to position itself in a favorable position vis-a-vis its environment—whether it is capable of changing and adapting to environmental changes.

Obviously, these organizational level outputs are contributed to by the function-

ing of groups or units (departments, divisions, or other subunits within the organization). Organizational output also is influenced by individual behavior, and certain individual level outputs (affective reactions such as satisfaction, stress, or experienced quality of working life) may be desired outputs in and of themselves.

The Organization as a Transformation Process

So far, we have defined the nature of inputs and outputs for the organizational system. This approach leads us towards thinking about the transformation process. The question that any manager faces, given an environment, a set of resources, and history, is "How do I take a strategy and implement it to produce effective organizational, group/unit, and individual performance?"

In our framework, the means for implementing strategies, or the transformation mechanism in the system is *the organization*. We therefore think about the organization and its major component parts as the fundamental means for transforming energy and information from inputs into outputs (see Exhibit 4). The question then is what are the key components of the organization, and what is the critical dynamic which describes how those components interact with each other to perform the transformation function?

Organizational Components

There are many different ways of thinking about what makes up an organization. At this point in the development of a science of organizations, we probably do not know what is the one right or best way to describe the different components of an organization. The question then is to find approaches for describing organizations that are useful, help to simplify complex phenomena, and help to identify patterns in what may at first blush seem to be random sets of activity. The particular approach

EXHIBIT 3 KEY ORGANIZATIONAL OUTPUTS

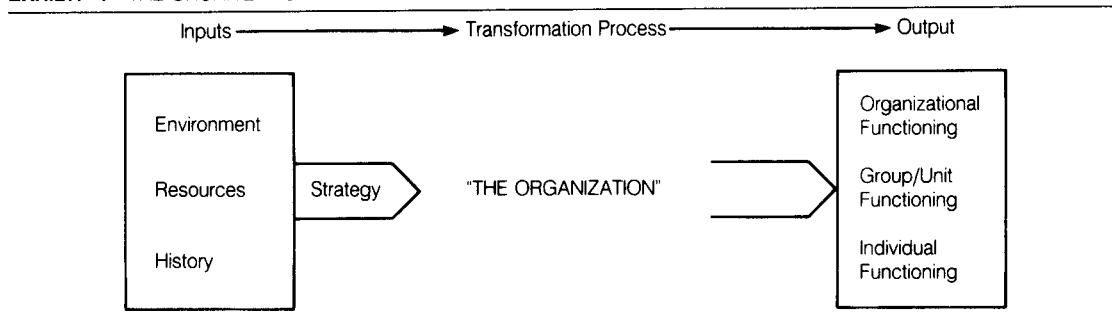
ORGANIZATIONAL FUNCTIONING

- Goal Attainment
- Resource Utilization
- Adaptability

GROUP/UNIT FUNCTIONING

INDIVIDUAL FUNCTIONING

- Behavior
- Affective Reactions

EXHIBIT 4 THE ORGANIZATION AS A TRANSFORMATION PROCESS

here views organizations as composed of four major components: (1) the task, (2) the individuals, (3) the formal organizational arrangements, and (4) the informal organization. We will discuss each one of these individually. (See Exhibit 5 for overviews of these components.)

The first component is the *task* of the organization. The task is defined as the basic or inherent work to be done by the organization and its subunits. The task (or tasks) is the activity the organization is en-

gaged in, particularly in light of its strategy. The emphasis is on the specific work activities or functions that need to be done, and their inherent characteristics (as opposed to characteristics of the work created by how the work is organized or structured in this particular organization at this particular time). Analysis of the task would include a description of the basic work flows and functions, with attention to the characteristics of those work flows such as the knowledge or skill demands made by the work,

EXHIBIT 5 KEY ORGANIZATIONAL COMPONENTS

<i>Component</i>	<i>Task</i>	<i>Individual</i>	<i>Formal Organizational Arrangements</i>	<i>Informal Organization</i>
DEFINITION	The basic and inherent work to be done by the organization and its parts.	The characteristics of individuals in the organization.	The various structures, processes, methods, etc. that are formally created to get individuals to perform tasks.	The emerging arrangements including structures, processes, relationships, etc.
CRITICAL FEATURES OF EACH COMPONENT	<ul style="list-style-type: none"> ■ The types of skill and knowledge demands the work poses. ■ The types of rewards the work inherently can provide. ■ The degree of uncertainty associated with the work, including factors such as interdependence, routineness, etc. ■ The constraints on performance demands inherent in the work (given a strategy). 	<ul style="list-style-type: none"> ■ Knowledge and skills individuals have. ■ Individual needs and preferences. ■ Perceptions and expectancies. ■ Background factors. 	<ul style="list-style-type: none"> ■ Organization design, including grouping of functions, structure of subunits, and coordination and control mechanisms. ■ Job design. ■ Work environment. ■ Human resource management systems. 	<ul style="list-style-type: none"> ■ Leader behavior. ■ Intragroup relations. ■ Intergroup relations. ■ Informal working arrangements. ■ Communication and influence patterns.

the kinds of rewards the work inherently provides to those who do it, the degree of uncertainty associated with the work, and the specific constraints inherent in the work (such as critical time demands, cost constraints, etc.) The task is the starting point for the analysis, since the assumption is that a primary (although not the only) reason for the organization's existence is to perform the task consistent with strategy. As we will see, the assessment of the adequacy of other components will be dependent to a large degree on an understanding of the nature of the tasks to be performed.

A second component of organizations concerns the *individuals* who perform organizational tasks. The issue here is identifying the nature and characteristics of the individuals that the organization currently has as members. The most critical aspects to consider include the nature of individual knowledge and skills, the different needs or preferences that individuals have, the perceptions or expectancies that they develop, and other background factors (such as demographics) that may be potential influences on individual behavior.

The third component is the *formal organizational arrangements*. These include the range of structures, processes, methods, procedures, etc., that are explicitly and formally developed to get individuals to perform tasks consistent with organizational strategy. Organizational arrangements is a very broad term which includes a number of different specific factors. One factor of organizational arrangements is organization design, how jobs are grouped together into units, the internal structure of those units, and the various coordination and control mechanisms used to link those units together (see Galbraith, 1977; Nadler, Hackman & Lawler, 1979). A second factor in organizational arrangements is how jobs are designed (Hackman & Oldham, 1980) within the context of organizational designs. A third factor is the work environment, which includes a number of factors

which characterize the immediate environment in which work is done, such as the physical working environment, the work resources made available to performers, etc. A final factor includes the various formal systems for attracting, placing, developing, and evaluating human resources in the organization.

Together, these factors combine to create the set of organizational arrangements. It is important to remember that these are the formal arrangements, formal in that they are explicitly designed and specified, usually in writing.

The final component is the *informal organization*. In any organization, while there is a set of formal organizational arrangements, over time another set of arrangements tends to develop or emerge. These arrangements are usually implicit and not written down anywhere, but they influence a good deal of behavior. For lack of a better term, these arrangements are frequently referred to as the informal organization and they include the different structures, processes, arrangements, etc., that emerge over time. These arrangements sometimes arise to complement the formal organizational arrangements by providing structures to aid work where none exist. In other situations they may arise in reaction to the formal structure, to protect individuals from it. It may therefore either aid or hinder organizational performance.

A number of aspects of the informal organization have a particularly critical effect on behavior, and thus need to be considered. The behavior of leaders (as opposed to the formal creation of leader positions) is an important feature of the informal organization, as are the patterns of relationships that develop both within and between groups. In addition, there are different types of informal working arrangements (including rules, procedures, methods, etc.) that develop. Finally, there are the various communication and influence patterns that

combine to create the informal organization design (Tushman, 1977).

Organizations can therefore be thought of as a set of components, the task, the individuals, the organizational arrangements, and the informal organization. In any system, however, the critical question is not what the components are, but rather the nature of their interaction. The question in this model is, then, what is the dynamic of the relationship among the components? To deal with this issue, we need to return to the concept of congruence or fit.

The Concept of Congruence

Between each pair of inputs, there exists in any organization a relative degree of congruence, consistency, or "fit." Specifically, the congruence between two components is defined as follows:

the degree to which the needs, demands, goals, objectives and/or structures of one component are consistent with the needs, demands, goals, objectives and/or structures of another component.

Congruence, therefore, is a measure of the goodness of fit between pairs of components. For example, consider two components, the task and the individual. At the simplest level, the task can be thought of as inherently presenting some demands to individuals who would perform it (i.e., skill/knowledge demands). At the same time, the set of individuals available to do the tasks have certain characteristics (i.e., levels of skill and knowledge). Obviously, when the individual's knowledge and skill match the knowledge and skill demanded by the task, performance will be more effective.

Obviously, even the individual-task congruence relationship encompasses more factors than just knowledge and skill. Similarly, each congruence relationship in the model has its own specific characteristics. At the same time, in each relationship, there also is research and theory which can guide the assessment of fit. An overview of

the critical elements of each congruence relationship is provided in Exhibit 6.

The Congruence Hypothesis

Just as each pair of components has a degree of high or low congruence, so does the aggregate model, or whole organization, display a relatively high or low level of system congruence. The basic hypothesis of the model builds on this total state of congruence and is as follows:

other things being equal, the greater the total degree of congruence or fit between the various components, the more effective will be the organization, effectiveness being defined as the degree to which actual organization outputs at

EXHIBIT 6 DEFINITIONS OF FITS

<i>Fit</i>	<i>The Issues</i>
Individual-organization	To what extent individual needs are met by the organizational arrangements. To what extent individuals hold clear or distorted perceptions of organizational structures, the convergence of individual and organizational goals.
Individual-task	To what extent the needs of individuals are met by the tasks. To what extent individuals have skills and abilities to meet task demands.
Individual-informal organization	To what extent individual needs are met by the informal organization. To what extent does the informal organization make use of individual resources, consistent with informal goals.
Task-organization	Whether the organizational arrangements are adequate to meet the demands of the task, whether organizational arrangements tend to motivate behavior consistent with task demands.
Task-informal organization	Whether the informal organization structure facilitates task performance, whether it hinders or promotes meeting the demands of the task.
Organization-informal organization	Whether the goals, rewards, and structures of the informal organization are consistent with those of the formal organization.

individual, group, and organizational levels are similar to expected outputs, as specified by strategy.

The basic dynamic of congruence thus views the organization as being more effective when its pieces fit together. If we also consider questions of strategy, the argument expands to include the fit between the organization and its larger environment. An organization will be most effective when its strategy is consistent with the larger environment (in light of organizational resources and history) and when the organizational components are congruent with the tasks to be done to implement that strategy.

One important implication of the congruence hypotheses is that organizational problem analysis (or diagnosis) involves description of the system, identification of problems, and analysis of fits to determine the causes of problems. The model also implies that different configurations of the key components can be used to gain outputs (consistent with the systems characteristic of equifinality). Therefore the question is not finding the "one best way" of managing, but of determining effective combinations of components that will lead to congruent fits among them.

The process of diagnosing fits and identifying combinations of components to produce congruence is not necessarily intuitive. A number of situations which lead to congruence have been defined in the research literature. Thus, in many cases fit is something that can be defined, measured, and even quantified. There is, therefore, an empirical and theoretical basis for making assessment of fit. In most cases, the theory provides considerable guidance about what leads to congruent relationships (although in some areas the research is more definitive and helpful than others). The implication is that the manager who is attempting to diagnose behavior needs to become familiar with critical aspects of relevant orga-

nizational behavior models or theories so that he or she can evaluate the nature of fits in a particular system.

The congruence model is thus a general organizing framework. The organizational analyst will need other, more specific "sub models" to define high and low congruence. Examples of such submodels that might be used in the context of this general diagnostic model would be (1) Job Characteristics model (Hackman & Oldham, 1980) to assess and explain the fit between individuals and tasks as well as the fit between individuals and organizational arrangements (job design); (2) Expectancy Theory models of motivation (Vroom, 1964; Lawler, 1973) to explain the fit between individuals and the other three components; (3) the Information Processing model of organizational design (Galbraith, 1973; Tushman & Nadler, 1978) to explain the task-formal organization and task-informal organization fits; or (4) an Organizational Climate model (Litwin & Stringer, 1968) to explain the fit between the informal organization and the other components. These models and theories are listed as illustrations of how more specific models can be used in the context of the general model. Obviously, those mentioned above are just a sampling of possible tools that could be used.

In summary, then, we have described a general model for the analysis of organizations (see Exhibit 7). The organization is seen as a system which takes inputs and transforms them into outputs. At the core of the model, the transformation process is the organization, seen as composed of four basic components. The critical dynamic is the fit or congruence among the components. We now turn our attention to the pragmatic question of how to use this model for analyzing organizational problems.

A PROCESS FOR ORGANIZATIONAL PROBLEM ANALYSIS

The conditions that face organizations are