ABSTRACT

A COMPARISON OF MANAGERIAL BEHAVIOR
IN COOPERATIVES AND INVESTOR OWNED FIRMS
SERVING FARMERS

By

Ellis Edward Perraut

What difference does it make whether farmers are served by cooperatives or investor owned firms? Are these two forms of organizations really different?

Cooperative ownership principles result in owners being more interdependent and interactive with managers of the work organization than do investor ownership principles. This difference results in a difference in manager roles and cooperative firm behavior unless the interdependence and interaction is offset by technological constraints, complexity, product diversity, and rate of change in the environment. Institutional Analysis and Organizational Behavior-Contingency Theory are used to link the influence of ownership principles and task environment to managerial role behavior.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

What difference does it make whether farmers are served by cooperatives or by investor owned firms? Are these two forms of organizations really different? The purpose of this thesis is to help develop answers to these questions by focusing on one aspect of behavior in cooperatives and investor owned firms. Specifically, we will address the question, "Is manager behavior the same or different in cooperatives and investor owned firms serving farmers?" We will argue that the principal difference between the structure of cooperatives and investor owned firms is contained in their ownership principles. Therefore, we examine the impact that different ownership principles have on managerial roles and behavior. Then we ask how the manager's behavior in turn influences organizational choices.

The objective of this first chapter is to build a framework for analyzing and understanding managerial behavior. We begin by defining the ownership and legal structure of cooperatives. Then we describe a model of managerial behavior. This model is expanded in Chapters 2 and 3 and applied to four types of cooperative structures in Chapters 4 through 7. These four types of structures reflect the fact that cooperatives operate in different types of environments and may be organized differently. Thus, an understanding of managerial behavior can only be obtained if we account for differences in the types of organizations in which they act.

1.2 User Owned and Investor Owned Firms

The two forms of organizations that we will compare are non-cooperative and cooperative firms. These two forms of organizations are distinguished as follows. An Investor Owned Firm (IOF) is owned by the suppliers of equity capital. Profits from the operation of the investor owned firm are distributed to investors in proportion to their stock holding. Formal control of the investor owned firm is legally vested with investors in proportion to the number of stocks each owns. A cooperative or User Owned Firm (UOF) is owned by users. Users purchase supplies from the cooperative or sell their products to the cooperative for marketing. Benefits of ownership are in the form of either lower input purchase costs or higher prices for user production sold to the cooperative. The cooperative is "not for profit." Benefits are distributed to owners in proportion to their use of cooperative services or products. Formal control is legally vested with users on a one-person, one-vote basis. Other voting rules are used, but only by a minority of cooperative farm organizations.

Cooperative organization was first successfully formalized by textile workers in Rochdale, England in 1844, inspired by such economists as Robert Owen. Since then user owned organizations have been given legal status in the United states by such enabling legislation as the Sherman Antitrust Act (~~1980~~), the Clayton Act (1914), and the Capper-Volstead Act (1922).

Roy (1976, 267-268) describes the legal status of the cooperative as a corporation, but in an economic sense it is a co-partnership. "A corporation is an 'artificial (not natural) person or being, invisible, intangible and existing only in contemplation of law.' A 'partnership is comprised of natural persons, visible, tangible and not a separate entity apart from its owners.'" According to Roy, it is this hybrid of tendencies that makes the cooperative so difficult to analyze.

One school of thought holds that cooperatives are not firms in the true economic sense but exist only to maximize the welfare of its users. Here, cooperatives act as a multifirm plant. They have no relevant boundaries of its own for purposes of decision making apart from their user-owners (Emelianoff, 1948; Robotka, 1957; and Phillips, 1953).

A second school of thought holds that cooperatives are independent decision-making and risk bearing business firms whose equity happens to be held by certain patrons (Roy, 1976, 269). Like any private enterprise the relevant decisional boundary is the business entity. Thus, decisions are guided by the goal of maximizing benefits to the enterprise's owners (Helmsberger and Hoos, 1962; and Boulding, 1965).

The third school holds that cooperatives exhibit tendencies of both conditions; maintaining independence when independence nets a higher return to owners or maintaining dependence when it is more advantageous to do so. In this sense the cooperative is a revocable horizontal combination, a coalition (Sosnick, 1968; see Roy, 1976, 270). This is the approach that we are adopting. In fact, we will show how ownership principles and the environment interact to result in both dependent and independent cooperative owners and organizations.

Some of the confusion surrounding the decisional boundaries of the cooperative can be avoided by differentiating between the **owner association of users** that owns the cooperative and the **work organization**

of employees that is charged with carrying out the directions of the owner association (Jaques, 1976, Ch. 5). The owner association is a political organization in which no member has control over another member's behavior and must arrive at decisions collectively along the lines of established rules. It has formal authority over the work organization.

The work organization, in turn, has unilateral authority over the behavior of its workers and makes decisions according to a hierarchy of authority. The work organization has no authority over the behavior of its owners outside of special contracts. A description of the behavior of a cooperative could be very different depending on whether the owner association, the work organization, or the total organization was being referred to. This delineation can also be made of the investor owned firm, implying that principal differences between investor owned firms and user owned firms begin at the association level, not the work organization level.

Some of the incentives to join the owner association of the cooperative are:

- to lower transaction costs (Coase, 1937; Williamson, 1975; Ouichi, 1980)
- to offset or establish market power (Norris; Baumel, 1981)
- to effect the surrounding environment through collective social political action (Olson, 1971; Hirshman, 1970; Boulding, 1965).

William Ouchi (1980) extends the concept of transaction costs to two conditions which increase the cost of mediating exchanges between individuals: goal incongruence and performance ambiguity. Goal incongruence is the degree to which the parties do not agree on what performance should be. Performance ambiguity states that the performance characteristics are difficult to perceive or define. He implies that organizations such as cooperatives incur lower transaction costs through the socialization or indoctrination of common goals which becomes more important as the degree of performance ambiguity increases. According to Ouchi's explanation, prices are a simple coordinating device that work well when performance ambiguity is low, as in a market exchange. Rules coordinate well with moderate degrees of goal incongruence and performance ambiguity, as in a formal organization. Socialization works well when goal incongruence is low and performance ambiguity is high, as in transactions in a clan, a cooperative, or a Japanese firm.

> "Indeed, grain farmers who need a large grain elevator do not form corporations which take over farms and make farmers into employees; instead they form a cooperative to own and operate the elevator" (Ouchi, March 1980, 129).

John Wagner (1982) explores cross cultural alternatives to the unilateral contributions-benefits reward system that is common in western business organizations (March and Simon, 1958, 83-89). Wagner's paradigm shows that socialization of collective values can provide an alternative means of organization control but that a collective self image or complete collectivization is culturally determined and not totally within the control of the organization.

This thesis will address constraints on the manager arising from the owner association and from the work organization. Figure 1.1 shows a simple conceptualization of the two organizations in a cooperative and in an investor owned firm. The importance of considering the impact of both of these organizations on organization behavior and performance was highlighted by Georges Fauquet (1935):

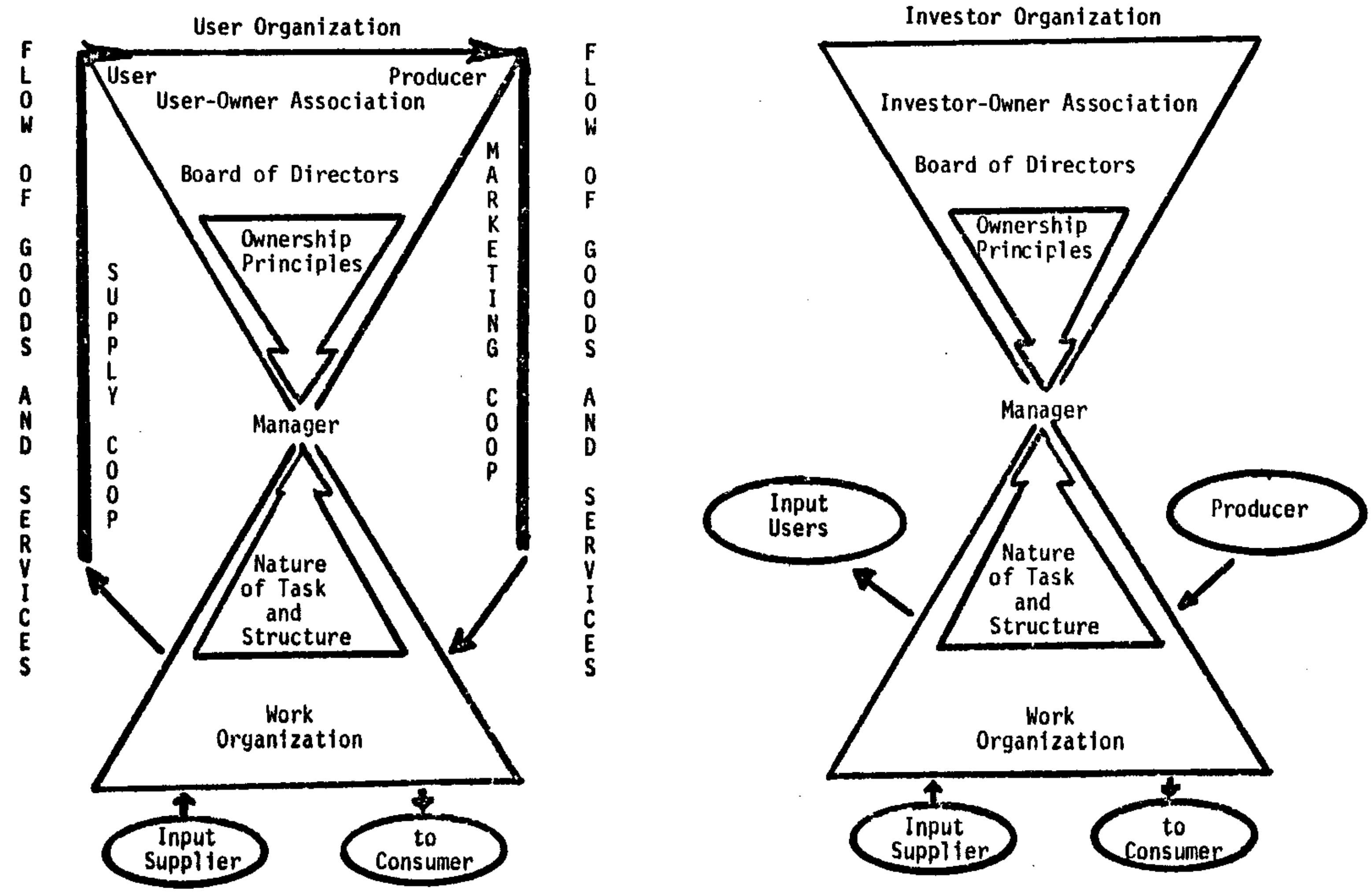


FIGURE 1.1

Two Organizations In Externally Owned Firms: Owner Association/Work Association

> A cooperative consists of two essential elements, a democratic association of persons and an economic enterprise. In separating these elements for the purpose of analysis the essen tial is lost, since it is the manner in which the two are coordinated that forms the basic problem of cooperative-- Georges Fauquet (1935) (cited in Vitaliano, 1977, 21).

Our attention is focused on farmer-owned cooperatives which supply services to their owners. Farm supply cooperatives buy inputs for owners. Farm marketing cooperatives distribute and market owner production. User owners buy from and sell to the cooperative in a market-like transaction. We do not consider a production or collective cooperative where the owner association and business organization are the same and transactions are conducted within the hierarchy. We consider only a cooperative where users collectively own a separate business entity.

1.3 Theories of the Firm

Is managerial behavior the same or different in cooperatives and investor owned businesses serving farmers? In comparing the impact of ownership principles on the behavior of the manager it is apparent that we are asking a question of behavior within the firm. This is a different question than the firm's behavior in the market as offered by the economic model of the firm. Some means of institutional analysis of the impact of ownership principles must be made beyond the economic model's explanation of organizational behavior. For example, the economic model does not suggest how owner control over the firm is exercised. (See Table 1.1 for a summary of constraints of profit maximization theory.) The internal features of the organization, the manner in which tasks and authority are divided and then integrated into a collective whole are important explanatory variables that are affected by ownership principles.

TABLE 1-1. Conditions of the Firm Limiting the Profit Maximization Hypothesis

Condition	Examples
Dynamic Uncertainty	future value, risk aversion, time horizon
Organization Complexity	selective attention, filtering, subordinate goal conflict, reward system, goal displacement
Goal Conflict	satisficing, sequential attention, security, prestige, power, growth
Degree of Manager Discretion	entry barriers, product differentiation, government favors

(Synthesized from Scherer, 1980, 37-40.)

The task of developing a reasonably complete behavioral theory of the cooperative was begun by Helmsberger and Hoos (1962). Eschenburg (1971) and others goes beyond a single goal function but still falls short of explaining the process of conflict resolution within the organization.

Real organizations do not maintain perfect control over all of their activities to reach an optimal solution. As March and Simon (1958), Williamson (1975), Baumol (1959) and Liebenstein (1979) have pointed out, to maintain such control is not often possible, globally rational or cost effective. Instead, satisfactory solutions, organizational slack, and individual behavior adjustments are made to rationalize or bargain tradeoffs rather than to reach an optimal solution (Roberts, 1975). Understanding market behavior assumptions of optimizing behavior may be a good first approximation of firm behavior in the market, but not of behavior internal to the firm.

Within the organization, decisions are structured by the differentiation of authority and tasks. This differentiation transforms each task into a set of problems for each member and then integrates these decisions into a coordinated collective action. Instead of one decision maker as suggested by the simplifications of economic analysis, there are many decision makers. With many decision makers integrated into an organizational whole the question of who has the resources, influence, and desire to affect organizational choices becomes one of political and organizational behavior (Roberts, 1975).

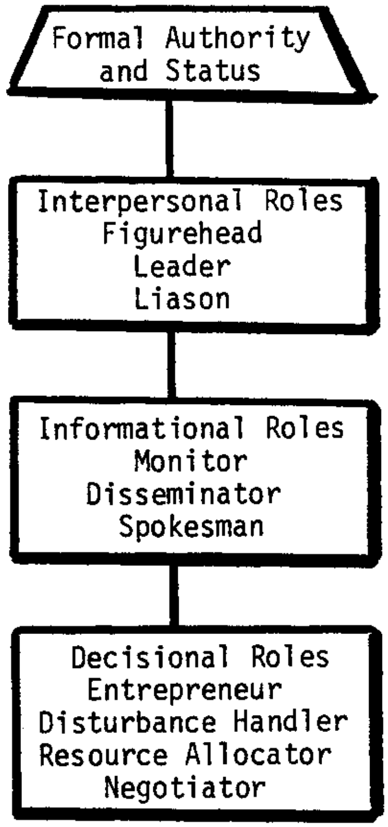
In this thesis, managerial behavior is examined in terms of the behavioral theory of the firm.

1.4 A Model of Managerial Behavior

In actually observing managerial behavior in the work environment Mintzberg (1973) concludes that the organization work flow can constrain the manager as much as the manager controls the organization. Mintzberg found the manager, particularly at the senior level to be overburdened by work and driven to brevity, fragmentation, superficiality, and a focus on short term problems. "Successful" managers were not constrained by formal information systems containing aggregated, historical information but developed their own network of contacts for gaining current qualitative and unaggregated information. This enabled managers to anticipate problems and respond to them rather than to merely react. Managers need more information than provided by formal channels and find ways to obtain it.

Mintzberg (1973) describes eleven observable managerial roles that categorize the activities of the manager. Managerial positions are designed to fill each of these roles to some degree. As shown in Figure 1.2, there is an authority role, three interpersonal roles, three informational roles, and four decisional roles. The amount of time spent in each role varies significantly by position in the hierarchy and other situational determinants.

The position of authority creates interpersonal roles. The manager is a figurehead representing the organization on matters of formality. The manager serves as a leader responsible for motivating, directing, staffing, etc. of subordinates. The manager also serves as a liason interacting with peers and others outside of the organization in order to gain favors and information.



(Mintzberg, 1973, 59)

Eleven Manager Roles

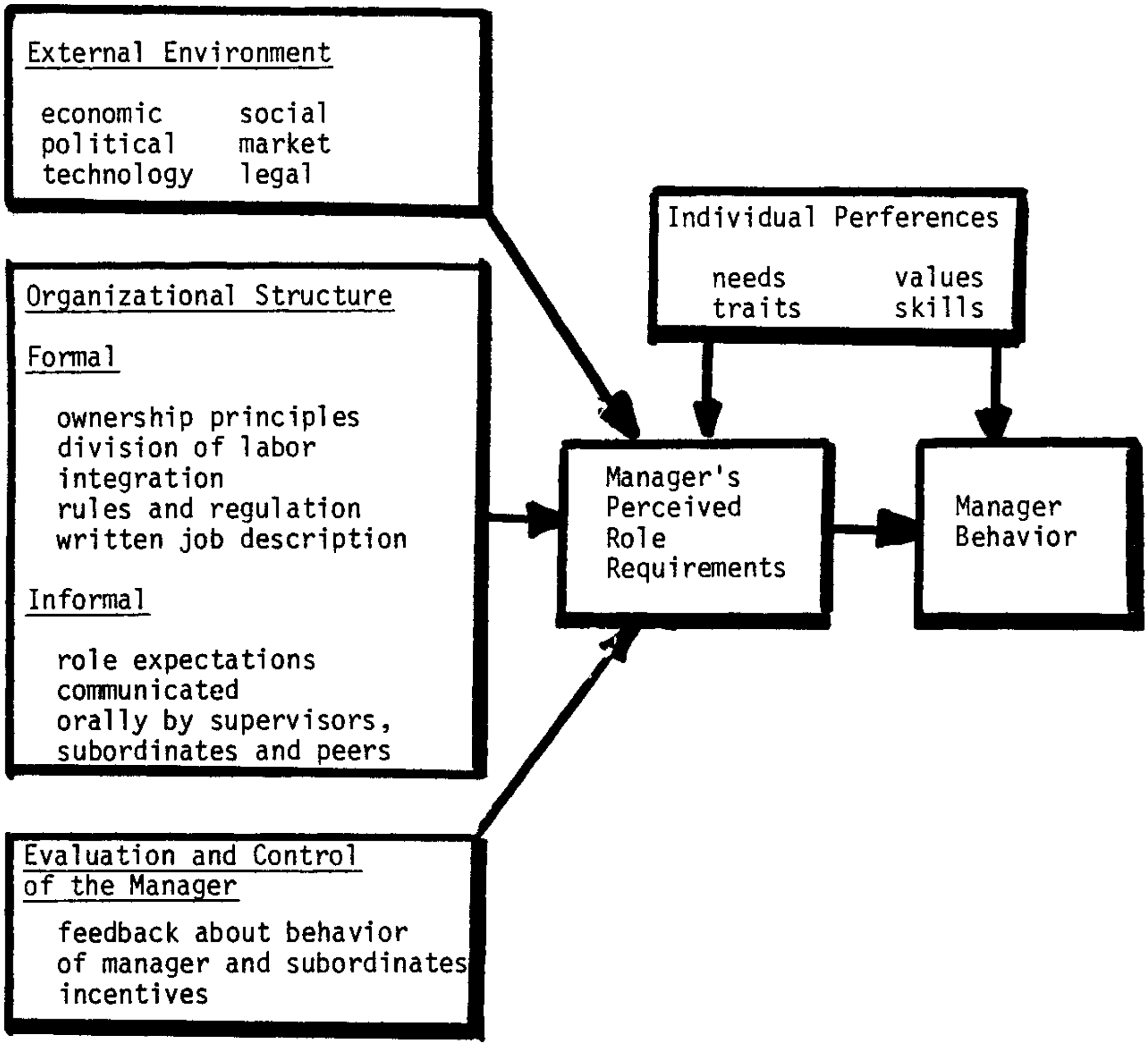
FIGURE 1.2

Because of the manager's position he is also a focal point of information originating both inside and outside the organization. The manager monitors, receives and collects information. The manager disseminates and transmits the information within the organization. The manager serves as a spokesman, disseminating information regarding the organization into the environment outside of the work organization.

Information and authority make the manager the focal point of strategic decisions affecting the entire organization. As an entrepreneur, the manager initiates change within his delegated authority. As a disturbance handler, the manager takes charge when the organization is threatened. As a resource allocator, the manager directs where the organization will expend effort and time. As a negotiator, the manager bargains with others on behalf of the organization (Mintzberg, 1973, 55-94).

Situational Determinants of Manager Role Requirements

As shown in Figure 1.3, there are four classes of variables which comprise the situational determinants of managerial role requirements; external environment, organizational structure, control system and individual preferences - perceptions (Yukl, 1981, Roberts, 1975; Shaffer, 1982). These situational conditions determine the manager's perceived role requirements. The individual's preferences together with perceived role requirements determine the manager's behavior. The situational determinants of the manager's perceived role determine the decisions that will cross the manager's desk and the resources that will be available to the manager to negotiate conflicts in the preferences and beliefs of other organizational members.



(Adapted from Yukl, 1981, 171; Roberts 1975, 417)

Situational Determinants of Manager Behavior

FIGURE 1.3

The environment literally refers to everything outside of the organization, including: its technology base, the nature of its products, its customers, its competitors and the economic and political and social setting that surrounds the organization. Economic models consider the degree of competition of the market environment. This thesis will concentrate mostly on the degree of complexity and the rate of change in the environment and the impact of external ownership on the manager of the work organization.

Organizational structure is determined by the decision makers in the organization and by the degree of coerciveness of the external environment. Organizational structure can be divided into two parts, formal and informal. Formal elements of organizational structure include ownership principles, rules and regulations, written job descriptions, formal objectives and the division of labor and authority. Informal determinants of structure are role expectations communicated orally and informally by superiors, subordinates, peers and others.

The evaluation and control system gives feedback to the manager about the manager's behavior and the performance of subordinates. It is used to direct the punishments and rewards that guide the manager's behavior. For top management the ideal control system would limit the opportunity sets of the other workers in the work organization to the outcomes that top management desires. In practice, however, individuals have their own set of desires including immediate financial gain, professional status, future career prospects, etc. Perfect control is too costly and must give way to crude measures of output: quotas, indicators, performance measures, periodic review, etc. Not all dimensions of performance can be adequately captured and measured.

The control system directs the attention of the manager to the extent that the manager believes that effort affects evaluations and to the extent that the manager considers the evaluating and evaluators important and influential. Dornbush and Scott (1975), consider seven dimensions that affect the control system; clarity of the goal pursued, efficacy of the procedures employed, predictability of the relation between task procedures and outcomes, frequency of the evaluations, visibility of task performances and outcomes to evaluators, and the extent of agreement among evaluators on the performance evaluating criteria (Dornbush and Scott, 1975, ix).

A manager's behavior is then determined by the manager's personal needs, traits, values and skills, and the roles the manager perceives are required of the position. A manager's characteristics are both exogenous to the firm (brought in from the outside) and endogenous (influenced by interaction within the firm). An individual's characteristics will determine how they respond to the decision problems which the organization imposes upon them. Individual needs can determine the incentives a manager responds to, for example, achievement, affiliation, or autonomy (Foster, 1980). An individual's traits refer to the characteristic way the manager interacts with others and executes problem solving behavior (Kiersey, Bates, 1978). Values are an important determinant of the individual referent set and opportunity set. Values can be personal, professional or organizationally influenced. Organizations can have ideologies that are determined by a wider cultural setting, by organization socialization, and by self selection of organization participants.

1.5 Summary

The framework presented suggests that the difference in manager behavior in user and investor owned firms can best be seen in terms of the managerial roles. Managerial roles are determined by the environment, the structure of the work organization, the total organizational evaluation and control system and the individual manager's preferences and perceptions. Exterior ownership of the investor and the user owned business suggests that there are two different organizational structures to consider--the owner association and the work organization. Exterior ownership principles are one source of organizational constraint imposed on the manager from the owner association. Another source of organizational constraint imposed on the manager is the nature of the task and the resources that are available to him or her, as determined by the rules and structure of the work organization and the environment that the whole organization operates in.

The influence of the environment on the manager and the structure of the organization will be discussed in Chapter 2. The impact of ownership principles on the whole organization will be discussed in Chapter 3. Chapters 4 to 7 will combine the impact of ownership principles and the impact of organizational task structure in the context of four types of organizational environments and structures. These organizational structure "types" are used to characterize different types of cooperatives.

CHAPTER 2

ENVIRONMENT AND CONTINGENCY THEORY

2.1 Introduction

Managerial behavior is influenced by the nature of the task and the environment. In Chapter 3 we consider the relationship between the manager(s) and the owners. Our discussion of organizational structure here is concerned with the influence of the work environment on the behavior of the manager in the work organization.

The nature of work tasks are determined by such things as technology and organizational structure. Organizational structure is created by organizational participants to coordinate work, information and influence in response to internal and external events and conditions. External ownership principles are imposed by the owner association on the work organization to influence its structure. Other situational factors are equally influential in determining managerial behavior. Measures of the work task environment include stability, complexity, technology, age and size of the organization. Mintzberg (1979) described four hypothetical organizational structures that are designed to cope with these influences. These organization structures will be used to compare and contrast managerial roles in investor owned firms and user owned firms. These organizational types include: 1) the simple structure; 2) the machine bureaucracy; 3) the professional structure; and 4) the divisionalized structure.

Mintzberg's (1979) analysis will be used to describe the effect of the task structure on the manager. The organizational structure types, and their environments are shown in Table 2-1.

2.2 Organizational Structure

Organizational structure is simply those aspects of patterns of behavior in the work organization that are stable or change only slowly over time (March and Simon, 1958, 170). Work organizational structure is determined by strategic decisions and through the interaction of work members and the environment.

As a form and as a process, organizational structure stands as the interface between the environment and work organization members to:

- divide and coordinate work, information and decision processes,
- stabilize inter and intra organizational behavior patterns and interdependencies (Mintzberg, 1979, 67),
- systematize external and internal uncertainties into apparently certain organization rationality (Thompson, 1967)
- legitimize power and authority or organization parts and
- regulate conflicts in preference and belief (Meyer, 1978, 356-357)

Organizations adapt their structure in response to environmental conditions.

Organizational structure also provides a stable reflection of the formal and semiformal decision processes within a work organization. This stability would be an asset in measuring differences in organizational behavior--at least as far as structure reflects present decisions. Using organizational structure to describe differences in

TABLE 2-1. Four Organizational Structures

	Structural Configuration	Prime Coordinating Mechanism	Environment
Chapter 4	Simple Structure	Direct Supervision	Simple, Dynamic
Chapter 5	Machine Bureaucracy	Standardization of Work Processes	Simple, Stable
Chapter 6	Professional Bureaucracy	Standardization of Skills	Complex, Stable
Chapter 7	Divisionalized Form	Standardization of Outputs	Simple, Stable Diverse

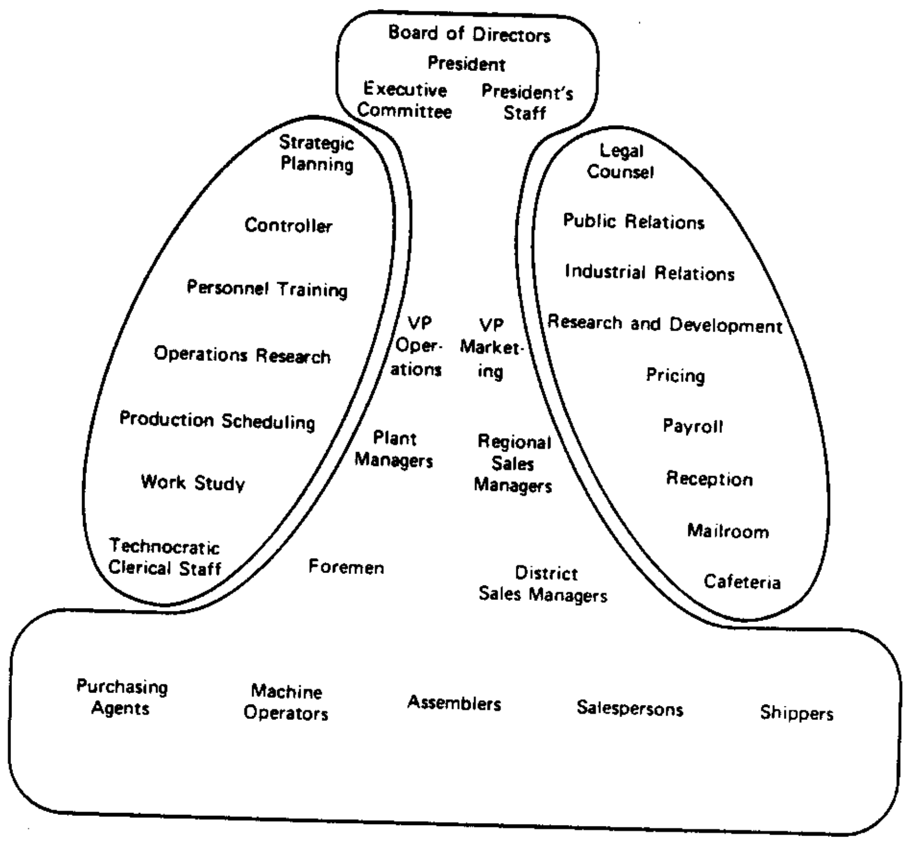
(Source: Mintzberg, 1979, 301)

managerial behavior in investor owned and user owned firms suggests two approaches: (1) measure and describe the structure of investor and user firm and analyze their similarities and differences; or (2) hold structure constant and compare the impact of user and investor ownership principles. The first approach is difficult in that all of the influences on organizational structure can be interactive and overlapping. This paper will take the second approach. The remainder of this chapter will present contingencies that affect organizational structure in order to lay out the four organizational structure "types" that will be used to describe managerial behavioral differences between user owned and investor owned firms in chapters 4-7.

2.3 Work Organizational Parts

To determine the nature of the task facing the manager it is necessary to determine how work is divided up and coordinated within the organization. The structure of the organization describes the formal interrelationships of work, information, and authority within the organization. The diagram in Figure 2.1 shows some of the specializations that can exist within a general work organizational structure.

In Figure 2.1, Mintzberg (1979) shows the operators, agents, shippers, etc. that are involved most directly with the production of goods and services of the work organization--the "operating core"--in the largest section of the diagram on the bottom. The entire middle section of the diagram shows the line authority of the organization from operating core through middle managers to the top managers. Mintzberg names the group of managers at the top of the organization "the strategic apex" because their decisions are to set the direction for the entire work organization. The groups to the right and left of the line organization



(Figure 2-5, Mintzberg, 1979, 33)

Organizational Functions

FIGURE 2.1

are the staff functions. Staff positions have no authority of their own but provide vital information and support for the organization. The staff group to the left are called the "technostructure"; their work serves to standardize the work of others in the organization. The support staff to the right provides other services for the organization that are not directly tied to the production of outputs but support the organization members themselves. Figure 2.2 summarizes these organizational parts.

The organizational parts can be distinguished in terms of the mechanisms used to coordinate their work (Mintzberg, 1979, 18-34).

Direct Supervision by the Strategic Apex

The Strategic Apex is charged with the overall responsibility for coordinating all of the parts of the organization in meeting organizational objectives set by the owner association. When a small organization becomes larger or when the work of employees is dependent upon the work of others, one employee may be appointed to coordinate the work of the others, introducing the coordination mechanism of direct supervision. Other mechanisms, such as standardization, may be introduced by management to expand their ability to directly supervise the work of others in a larger organization.[1]

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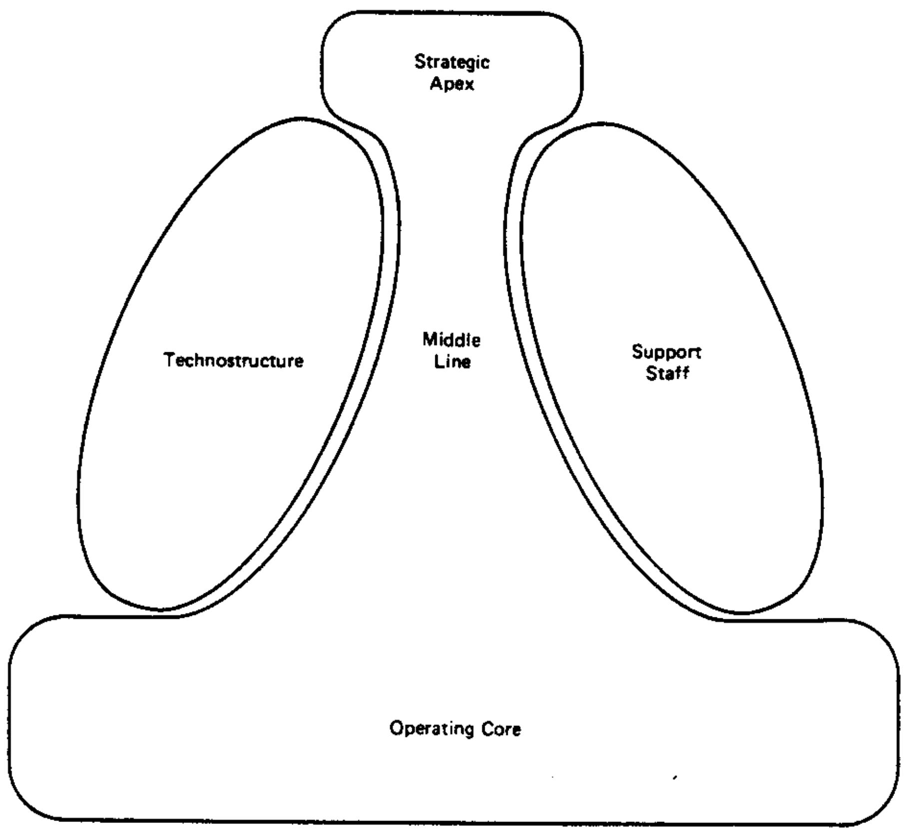
[1] Administrative management was mainly concerned with coordination through direct supervision in the formal organization. Henri Fayol (1916), a successful French mining industrialist, developed "Administrative Management." His ideas were made popular in the English speaking world by Fulton Gulick and Lyndall Urwick (1937). Max Weber (1958), a German professor developed "Bureaucratic Management" that coordinated activities formally, by standardization of work rules and job skills.



(Figure 2-1, Mintzberg, 1979, 20)

Five Organizational Parts

FIGURE 2.2

The strategic apex is responsible for adapting the organization to its environment. The strategic apex seeks to extend control over the organization and tends to centralize the organization whenever this is advantageous. Environments that are dynamic and hostile tend to favor centralization while environments that are complex and diverse tend to favor decentralized structures. According to Mintzberg (1979, 268-269) the main effect of hostility on structure is to temporarily centralize the organization and to selectively decentralize the work constellation facing the diversity.

Galbraith (1973, Chapter 2) suggested that the impact of the environment on organizational structure could be described in terms of the need to process information in the organization. As the environment becomes more complex the organization is forced to decentralize in order to disaggregate the information flow into manageable units. As the environment becomes more dynamic, the organization is forced to relax its authority system and allow organization subunits the autonomy to interact with the environment directly. Galbraith describes a continuum of coordination mechanisms including the option to reduce the level of performance or product diversity instead of adapting the organizational structure.

Lawrence and Lorsch (1967) distinguish three sources of environmental change and uncertainty that influence organizational structure: technology, market and production economics. These sources of environmental change and uncertainty creates two potentially conflicting design problems; differentiation of task into subunits and integration of subunits into whole tasks. After studying ten organizations in three industries they found that a firm in a simple and stable environment (container industry) favored coordination by direct supervision and standardization. A firm in a dynamic and complex environment (plastics industry) favored mutual adjustment through cross functional task teams. Firms in a mixed environment (food processing industry) favored some mix of coordination depending on the source and degree of uncertainty and change. A four part typology of environments and the hypothetical organizational types is shown in Table 2.2. The environment is described in terms of two dimensions, complexity and stability (Galbraith, 1973; Mintzberg, 1979). This typology will be used to describe the impact of ownership principles in three of the four environments described. A fourth organizational type adds the dimension of product diversity and will be discussed instead of an organizational structure in a dynamic and complex environment.

Imposing control on the work organization from outside the work organization concentrates decision making power at the top of the organization and encourages greater reliance on rules and regulations within the work organization. Two effective means of controlling the organization from the outside are: (1) to hold its most powerful decision maker, the chief executive officer responsible for its actions; or (2) to impose clearly defined standards on it. The first centralizes the structure and the second formalizes it (Mintzberg, 1979, 279; Pugh et al., 1969, 112).

The roles of the manager in the strategic apex tend to be broader, more abstract and have a longer time dimension than the roles of managers in the work organization below. The authority roles and the interpersonal roles tend to be more important in the apex. The strategic apex manager serves as a figurehead of organizational values to members in the work organization and represents the work organization to the external

TABLE 2-2. Organizational Types in Four Environments

	Stable	Dynamic
Simple	Machine Bureaucracy Centralized Bureaucratic	Simple Structure Centralized Organic
Complex	Professional Structure Decentralized Bureaucratic	Matrix/Adhocracy Decentralized Organic

(compiled from Mintzberg, 1979)

environment. The manager serves as a leader to coordinate and initiate change in the organization. The manager is the focus of communication between the environment and the work organization and serves as a liason.

Standardization of Outputs by Middle Managers

The middle line managers lie in between the strategic apex and the operating core. The middle manager extends the "span of control" or ability of the strategic apex to supervise the operating core. The authority of the middle manager is narrower than the managers in the strategic apex and defined by the area of responsibility that the middle manager is charged with. He or she takes his marching orders from the top managers. The greater the independence and responsibility of the middle manager the more authority and autonomy he or she must be given. Middle managers can be coordinated so that the organizational objectives are met by standardizing the output that they produce. As long as the divisional outputs make their specified contribution to the organization, the middle manager is in step with the other divisions.

The role of the middle manager is also affected by the environment. The more stability and simple the environment, the more centralized the organization can become. The more dynamic and complex the environment the more decentralized the organization which can mean more autonomy for the middle managers. Mintzberg (1979) also describes product diversity as leading to more autonomous middle managers. Managers facing product diversity need to coordinate and develop expertise in many markets. The DuPont Corporation (Chandler, 1962) was the first to break up centralized bureacratic structure into separate divisions--one for each product market.

The middle manager, like the technicians and the support staff, is particularly affected by the age and size of the organization. For example, the larger the organization, the more behavior becomes formalized. Also, the larger the organization, the more elaborate the structure becomes. Tasks are specialized, units are differentiated, administration is developed (Khadalla, 1977; Blau et al., 1976; Pugh et al., 1968 as summarized in Mintzberg, 1979, 227-234).

Organizations tend to formalize their structures as they become older. They learn more about adjusting to problems of communication and coordination. The organization tries to perpetuate its learning through formalizing standard operating procedures and routines (Starbuck, 1965, cited in Mintzberg, 1979).

Arthur Stinchcombe (1965) found that structure reflects the age of founding of the industry. Industries develop certain structures because of the technical and economic conditions of their time. As long as these conditions do not change for them, there is no reason to expect their structures to change. Traditions and vested interests tend to preserve structural form (Caffereta, 1982).

> Prefactory organizations--farms, construction firms, retail stores and the like--today maintain some of their original structural characteristics; specifically they rely more than others on unpaid family workers and self-employed owners instead of paid clerks. They retain, in effect, a craft structure (Mintzberg, 1979, 229).

The early nineteenth century saw the establishment of the bureaucratic structure employing paid clerks in apparel, banking and textiles. The railroad age brought in professional managers to replace owner managers--the second stage of bureaucratization of industry. In the modern age of motor vehicles, chemicals and electrical utilities came the growth of staff departments and professionalism (Stinchcombe, 1959, 59-60; Mintzberg, 1979, 228-230).

Alfred Chandler's (1966) comparative historical analysis of 70 of America's largest firms described how the age of the firm was associated with the degree of structural elaboration. Typical stages of structural elaboration are: first the organization vertically integrates and organizes along functional lines, then it diversifies its product line and geographic markets. For further growth, the organization must differentiate its structure along market lines then market groups. Complex structural elaboration occurs when international firms are faced with competing functional, product and geographic orientations, adopt a matrix form that gives equal weight to two or more of the orientations. Chandler also concluded that structures followed strategy in that centralized divisional forms seem to be the result of single industry strategy where as multidivisional forms resulted from diversification of product lines (Chandler, 1966).

Structures do not seem to change continuously but go through discontinuous transitions that result in fundamental changes in the way the organization's work is performed and coordinated.

Standardization of Work in the Operating Core

The work of the operating core is characterized by the standardization of work imposed on it by the technostructure. Standardization of work coordinates by analyzing work processes and breaking down the work into sequential, dependent steps that produce the desired output.[1] The

[1] Standardization of work stems from Frederick Taylor's "Scientific Management" (1895). Taylor, an engineer by training, developed the principles of Scientific Management in analyzing and standardizing the work and output of pig iron workers.

technostructure is responsible for standardizing the work of the operating core. When work is completely standardized the workers in the operating core no longer have control over the work process but are interchangeable labor inputs in a production "machine" designed by the professionals in the technostructure.

The degree of standardization of work is highly affected by the technology used. A technology that is highly regulating and sophisticated results in having little control over the flow of work. The degree of regulation refers to the extent to which the work operator is constrained by his instrument and the "locus of control" lies away from the operator. The more regulating the technical system, the more the locus of control over the work flow lies away from the operator, and the more the operator is constrained by standardized work rules. Sophistication refers to the degree of complexity of the technical system, that is, how difficult it is to understand. The more sophisticated the technical system, the more elaborate the support staff and administrative structure above the operators. More complexity results in more layers of administration (Hunt, 1972; Mintzberg, 1979, 249-266).

An example of a highly regulating and sophisticated technology is the mass production process. If the technology is extremely regulating and sophisticated, the operating core itself is automated and a process organization results, such as an oil refinery, chemical plants, power plants, etc.(Woodward, 1965; Mintzberg, 1979, 252). When the technology is not regulating or sophisticated, the control remains with the worker in the operating core such as in a unit, craft (Woodward, 1965) or professional organization (Mintzberg, 1979).

The degree of standardization of work is also affected by the degree of stability in the environment. A stable environment is one where the critical relationships do not change or change only slowly over time. If the environmental changes too rapidly, then the standardization of work rules break down because of the tight interdependency between work processes and the inability of the workers in specialized tasks to control their work process, even in the face of conflict. If the environment is complex (relationships are difficult to understand) then the standardization process can only be developed over time.

Thompson (1967, 159) describes the role of the mass production structure surrounding the operating core as protecting the operating core from environmental uncertainty by creating units that interface the uncertainty directly; e.g., marketing research to measure change in consumer preferences, product research to keep abreast of product changes in the market and public relations to mediate a potentially hostile public.

Mintzberg (1979) describes the roles of management surrounding the standardized work of the operating core as the decisional roles of disturbance handler and resource allocator. As the management position is successively lower in the organization, the problems become more routine, short term and use more standard procedures.

Workers stand the best chance of maintaining control over their work flow in a complex or unstable environment that is not conducive to the standardization of work in the operating core, or with a technology that is not sophisticated or regulating. Under these conditions the firm may choose to professionalize the workers in its operating core through the standardization of skills or professional training.

Standardization of Skills in the Technostructure

The technostructure uses standardization of skills to coordinate the work of the operating core. The standardization of skills requires more investment in the training and specialization of the professional than standardization of work. The training, however, offers an improvement to standardization of work where a complex environment makes work rules impractical. Professionals are trained to perform a limited diagnosis according to a field of training. In the technostrucure this allows the accountants, personnel trainers, operations researchers, and production schedulers to analyze and affect the work of the others in the organization.

Because of their training, professionals enjoy considerable autonomy within the organization. As staff members they have no formal authority and are called to fill informational roles of monitoring the work of the organization and disseminating information throughout the organization. Like the operating core, the technostructure is affected by the technology used and the environment. The environment must be somewhat stable in order for the diagnosis skills to remain viable.

Like the middle management and the support staff, the technostructure is affected by the age and size of the organization. The larger, more formal, and older the organization, the longer the technostructure has the opportunity to study and standardize the work of the organization. The skills of the technostructure change slowly over time and reflect the era of their inception and when they were taught.

Mutual Adjustment by the Support Staff

The support staff provides services not directly tied to the production of the organization but serves the need that arise within the organization. Mintzberg (1979) describes the work of the support staff as an integral part of the organization by virtue of the reduction of uncertainty that the support staff provides to the work of the organization. A mail room coordinates mail, a cafeteria helps workers to coordinate lunches, and a publishing house extends control over the publication of organization documents. The purpose of the support staff is to meet the needs of the organization and tailor its service to the need. Mintzberg describes this coordination between the support staff and the organization as mutual adjustment.

Mutual adjustment coordinates work through informal communication. Mutual adjustment is the simplest of the coordinating mechanisms and also allows the most complex communication. Mutual adjustment takes the form of direct contact in small groups and simple tasks, or task forces and work teams in dynamic environments and complex tasks (Galbraith, 1973). Trist and Bamforth (1951) concluded that the technical and social systems of coal mine work group structures were inextricably intertwined, providing efficiency and safety for coal mine workers. Mayo and Roethlisberger (1939) highlighted the importance of mutual adjustment and the "informal" organization in motivating workers in their "human relations" management approach (Foster, 1981, 8-24).

Like the middle line management and the technostructure, the support staff is strongly affected by the age and size of the organization. The larger the organization, the greater the need for support services to develop. The role of the support staff would be the most loosely defined and oriented toward interpersonal interaction.

2.4 Summary and Five Organizational Strutures

In summary, the nature of work in the organizational parts are distinguished by their major coordinating mechanisms. Mintzberg describes the coordinating mechanisms as forming a continuum as shown in Figure 2.3. The simplest coordination mechanism is through mutual adjustment. When the tasks require closer coordination, direct supervision is usually the next step. When employees need to be coordinated even more closely, then some form of standardization becomes necessary; standardization of the work process itself, standardization of outputs if the products are diverse, or standardization of work skills if the work process is too complex. In the face of a rapidly changing and complex environment, mutual adjustment may be resorted to on a small team basis (Mintzberg, 1979, Galbraith, 1973).

The organizational parts may use more than any one single coordinating mechanism; to some degree the mechanisms are substitutable. How much an organizational part will specialize in a coordinating mechanism or rely on some combination of them will depend upon the organization and such contingencies as environment, external ownership, power, technology, and the age and size of the organization. These contingencies have varying degrees of impact on the organizational parts as shown in Figure 2.4.

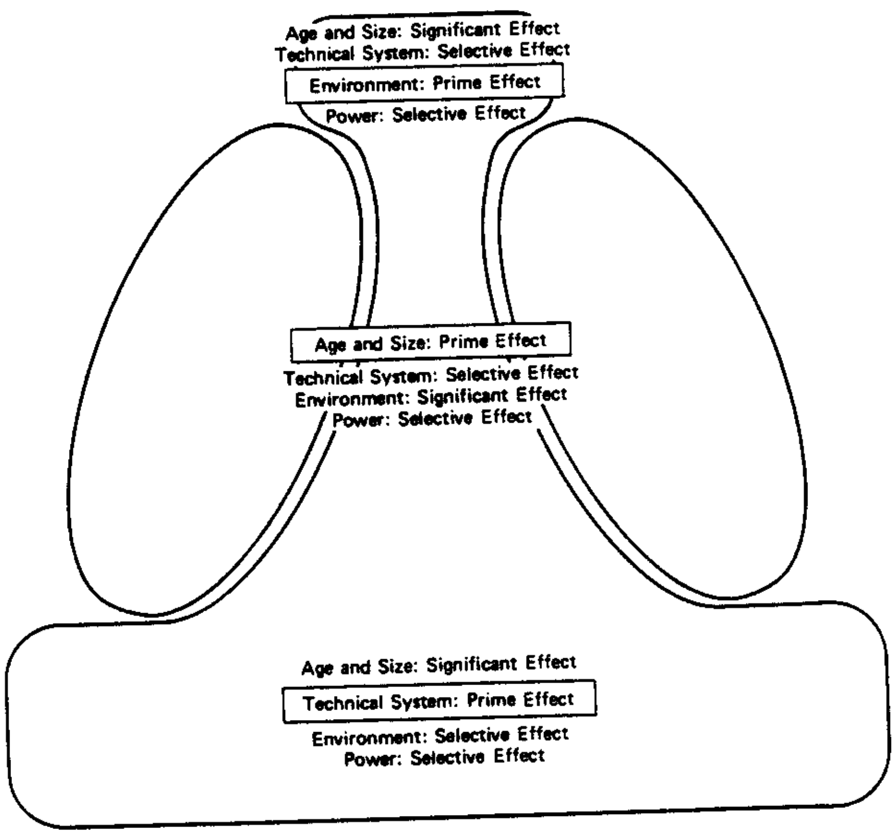
Environment has its prime effect on the strategic apex where managers and staff specialists are responsible for monitoring and adapting the organization to environmental change. Environment has less effect on the operating core whose production functions are often sealed off from environmental disturbance. Technical change has its most direct impact on the operating core where the work was done. Age and size has

Mutual Adjustment — Direct Supervision → Standardization of Work / Standardization of Outputs / Standardization of Skills → Mutual Adjustment

(Source: Mintzberg, 1979, 7)

Continuum of Coordinating Mechanisms

FIGURE 2.3



(Figure 16-1, Mintzberg, 1979, 297)

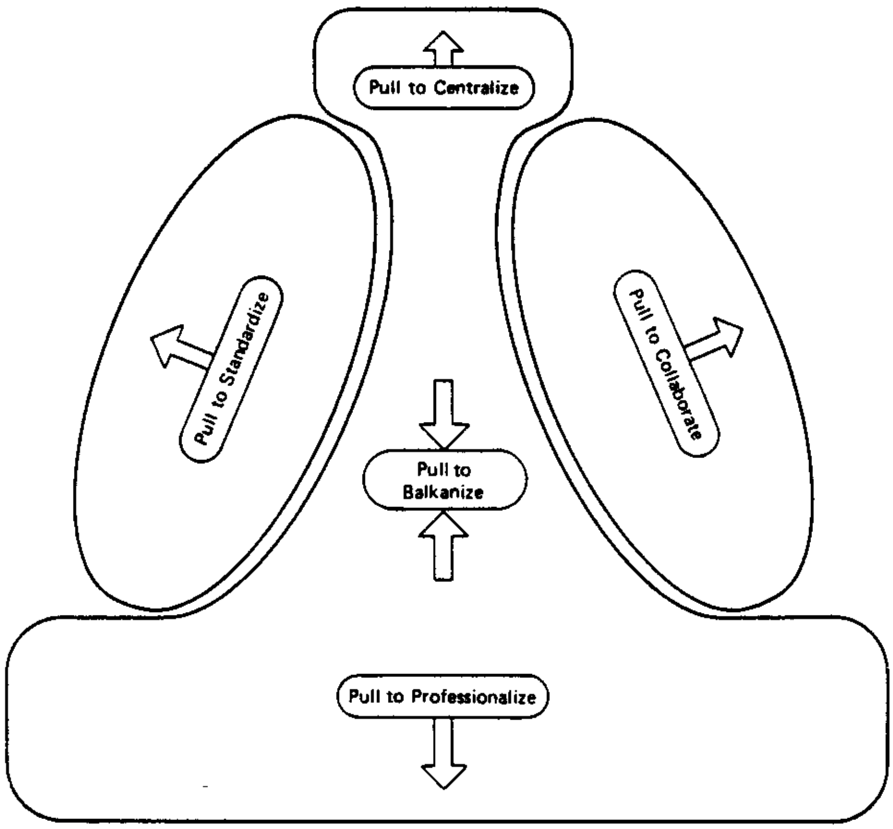
Contingency Effects by Level

FIGURE 2.4

an impact on all parts of the organization but its more pronounced effect is on structural elaboration in the middle of the structure.

As a result of specialization in coordinating mechanisms, the work organization may be pulled in a number of different directions depending upon the subunit and the contingencies surrounding the organization (see Figure 2.5). Hickson (1972, 217) described a subunit's intra-organizational power as the result of: (1) the degree to which a unit copes with uncertainty for the organization; and (2) the degree to which there is no substitute for the units information. If the environment is changing rapidly, the work organization requires close coordination, and the work <u>can</u> be coordinated by a few managers, then the organization may tend to be centralized. If the environment is stable and simple, however, direct supervision may be less necessary. The technostructure can coordinate much of the work of the organization through the standardization of work processes in a simple, stable environment. If the workers in the operating core are not constrained by technology or the standardization of work by the technostructure, their increasing skills can result in a structure like a craft firm or a professional structure. If product diversity calls for product orientation in order to interface the organization with specialized markets, then the middle managers gain more influence through the divisionalization of the organization. If the environment becomes extremely dynamic and complex, then the functional hierarchy might be selectively restructured into collaborating project teams that coordinate by mutual adjustment.

In chapters 4-7, we will allow the organization to be selectively pulled in the direction of each of these environmental contingencies in



(Figure IV-1, Mintzberg, 1979, 302)

Five Organizational Tendencies

FIGURE 2.5

order to create the organizational structure "types." These organizational types are characterized by one of the coordinating mechanisms. The interaction between the influence of work tasks and the influence of ownership principles (discussed in Chapter 3) can then be combined in an organizational setting. The organizational types and their key components are described in Table 2.1. This organizational typology developed by Mintzberg (1979) roughly corresponds to other organization typologies that vary by age and size: craft, entrepreneurial, bureaucratic, divisional, and matrix (Chandler, 1959; Lawrence and Lorsch, 1967) and by technology: unit, mass, and process (Woodward, 1965).

Some caveats are in order. First is the question of the direction of causation. Do environments determine structure or does structure select environment? Evolution theorists take the former approach while contingency theorists take the latter. The argument hinges on how able the manager is to direct the organization; is he or she directive or reactive? There is an association between environments and structure. Whether this association is brought about by, or in spite of, the manager is not essential to this study,but only that there is an association between situational factors and managerial behavior. Using the context of an environment and a structure we can hypothesize how much discretion the manager may then have (Caffereta, 1982; Pfeffer, 1978).

The response of structure to situation is also often lagged, which further confuses the relationship between structure and environment. Managers build up slack (Liebenstein, 1979, 477-502) and use other mechanisms (Galbraith, 1973, Chapter 2) to forestall change. But as Galbraith points out, these mechanisms have a function and respond to situational factors. In the long run we can expect some sort or organization "evolution" as suggested by Chandler's historical analysis (1959, 1-31).

Part of the problem in determining the direction of causation is the cross sectional research technique. While size, age, technology, environment and power have been shown to be statistically associated with structural features, most studies only consider two variables in a cross sectional study that does not control for other confounding variables. This has produced confusing and conflicting results (Mintzberg, 1979, 223). This emphasizes the necessity of accounting for the effect of the contingency factors but does not negate the significance of their impact on structure.

Our approach will be to bound the impact of contingency factors on the organizational structure by considering them in "clusters" that are associated with the four organizational types we use. The limitations of each structure will then be described in terms of its compatability with each relevant contingency factor.

CHAPTER 3

THE IMPACT OF OWNERSHIP PRINCIPLES

3.1 Introduction

The manager is at the intersection of two organizations: a work organization and an ownership association. The degree of interdependency between these two organizations influences the resources and decisions of the manager. In Chapter 2, we looked at how the organizational work tasks and the external environment influence organizational structure. In Chapter 3, we will look at a key source of influence on the behavior of the manager, the principles of ownership.

Two kinds of ownership principles distinguish cooperatives (user owned firms) and investor owned firms: (1) member ownership and control rights; and (2) benefit rights. Some of these ownership rights are listed in Table 3-1. Benefit rights determine how the "profits" or advantages of organizational resources will be distributed. Benefit rights that distinguish user and investor owned firms are "nonprofit" operation and limited return to capital. The impact of each of these rights on the behavior of the manager will be considered in this chapter.

Ownership principles are established by the charter and bylaws of the organization. An investor owned firm is an organization where owners commit some asset, resource or service to the organization in return for participation in the income and appreciation of the firm's capital. A user owned firm is an organization where members commit some asset, resource or service in return for participation in the services of the

TABLE 3-1. User and Investor Ownership Principles and Member Rights

	Investor Owned	User Owned
Membership Ownership and Control Principles		
Transaction Rights	Ownership Right	User Right
Decision Rights/Obligation	Limited Obligation	General Obligation
Investment Rights	Incremental Investment	Instrumental Investment
Voting Rights	Per Shares Owned	Per Member or Patronage
Member Benefit Rights	Profit Unlimited Return to Equity Capital Limited Liability and Future Commitment	"Non profit" Limited Return to Equity Capital May Involve Additional Investment with no Increase in Return to Equity

firm's operation. These services include participation in income generated by the firm's operation but generally do not include a vehicle to participate in the increased appreciation of the firm's assets.

In considering user and investor owned firms we will only discuss firms that have the whole set of rights listed below "Investor Owned" and "User Owned" in Table 3-1. The combinations of rights are virtually limitless and organizations can have any right to some degree. Nonprofit organizations supported by investors are called foundations or charitable organizations. An investor owned firm with closely associated active partners could exhibit the behavior suggested by the user ownership principles. A cooperative could institute voting rules based on shares owned results in the adaptation of some investor ownership behaviors. This analysis will only consider cooperatives with the entire set of these rights. These rights are mutually reinforcing, and in combination, produce the desired impact on managerial behavioral roles.

3.2 The Impact of External Ownership on the Manager

External ownership of the work organization exerts control on the manager's behavior through all five of the coordinating mechanisms discussed in Chapter 2. Control is defined to be the degree to which consistent behavior and output of A can be influenced and determined by B (Roberts, 1975, 219).

Owners can maintain decisional power in the organization through **mutual adjustment.** Owners can use appeals, threats, and previous decisions that limit and direct the options that are available to the manager. Members can form alliances and interest groups that the manager must consult with in order to assure the adaptation and success of decisions. To the extent that the manager must adjust to owner decisions and count on cooperation from all other contemporary decision makers, he must permit his decisions to be influenced by them. Interest group leaders must be consulted, listened to, canvassed and cooperated with because they have so much influence, knowledge and interest; even if they do not have the authority to dictate binding orders. To the extent that the manager is dependent upon the owner members to accept his decisions he must adapt to their point of view or influence them to accept his view. The coordinating mechanism of mutual adjustment highlights the degree of interdependence between the owners and the manager.

The charter and bylaws of the externally owned organization exerts other, more formal mechanisms of control over the manager; the manager is **directly supervised** by the board of directors, **decision processes** and work are circumscribed by policy, **outputs** are specified by reporting requirements and **skills** are specified by job description. These coordinating mechanisms are initiated by and on behalf of the owners to control the operation of the manager and the organization. These rules shape the rights and responsibilities of the "total" organization; owners, their representatives, managers and workers.

3.3 Member Ownership and Control

Investor owners have **ownership rights.** Ownership rights give title to the owner and allow the bearer of title to exclude others from the benefits of ownership (Schmid, 1978, 19, 42). The investor has title that gives a share of the firm's assets and the profits of the firm's operation. The investor can capture appreciation in the value of the firm by exercising exchange rights. The ability to transfer ownership is an important vehicle to capture current and future earnings. Financial markets lower the cost of transferring ownership rights.

User owners have **user rights** (Schmid, 1978, 133-136). User rights entitle the bearer to use the services of the firm but not to transfer rights to other individuals. Users must maximize value through patronage. User firm ownership is therefore limited to those that can make use of the firm's services. There are no markets developed to transfer the rights of usership. Some interesting effects of this right can be seen in McGregor's (1977) plywood cooperative whose members extracted the maximum return by restricting membership and selling off the assets of the firm. Rothschild-Whitt (1975, 76) extends the idea of capturing appreciation through dissolution by identifying it as a distinctive feature of the user owned firm. Use and patronage rights identify the operation of the firm more closely with the operation of the owner.

An example of how user rights can result in different firm behavior is the fertilizer shortage of 1973. When international prices for fertilizer were soaring most firms responded by selling off supplies of domestic fertilizer. User firm operation was more closely tied to the user's operation that needed fertilizer. The user owned firm typically did not capture the profits from higher prices but user-owners were able to maintain supplies of fertilizer for their own operation.

Related to ownership rights are investment rights and responsibilities. A user-owner is potentially responsible for further financing of the firm's operation whereas an investor-owner is not. A user-owner makes an **instrumental investment** that enhances the profitability of his farm operation whereas the investor makes an **incremental investment** that does not have to be related to his prime means of income (Jacques, 1976). Again, the result is to tie the user owner more tightly to the products and services of the user firm. The investor is more likely to be indifferent as to the operation of that investment, whether it is in agriculture, aerospace or mining, as long as the return is sufficient to justify the level of risk and uncertainty. The farm user-owner is often locked into the production of a commodity by climatic, legal, market, ecological, institutional and financial commitments (Harsh, et al., 1981, 151). The user investment must enhance or be compatible with the user's commitment to his farm operation. The user's instrumental investment decision makes the owner more dependent upon the operation of the user owned firm while the incremental investment decision of the investor makes the owner less dependent upon the operation of the investor owned firm (Lawrence and Johnson, 1953, 143-52).

The right of most investor-owners to control the decision process within the organization is limited depending on the proportion of ownership. Obligation is confined to the investment in the firm and not in the management of the business. Obligation to manage debt and the business falls to the general partner--in this case the general manager.

User-owners have general decision rights. Without incorporation, members are responsible for the debts of the organization and the operation of the firm. The rights of general partnership can be circumscribed by such factors as increasing the size and diversity of the membership. To the extent that general partnership rights are exercised in the user firm, one would expect to see more democratic behaviors among the user members than among the investor members, depending on cost. These democratic behaviors are described below.

Caffereta (1982) described eight indicators of the degree of **democraticization** in a formal democracy. Overall in the association, democratization led to: (1) maximizing opportunity to hold office; and

(2) maximizing opportunity to influence decision making. To the degree that user owners are able to exercise their general decision rights, the owner association should demonstrate more of these democratic behaviors than an investor association. To the extent that the investor-owners exercise limited decision rights, the investor member organization should exhibit more delegation of these rights to managers in the work organization.

These contrasting ownership rights imply that the user-owner is **more** dependent upon the operation of the user owned firm and the investor-owner is **less** dependent upon the operation of the investor owned firm. User ownership is not transferable, members are obligated to finance expansion and debt if necessary, members may be involved in management decisions, members' investments in the firm are instrumental and often tied to a capital intensive farm operation investment that is fixed. Investor ownership is transferable--often at low cost, owners are not obligated to finance further expansion, owners are not involved in management decisions, and owners' investments are incremental and not necessarily tied to any other income producing owner investment. User-owners share more points of interdependency with the user owned firm than investor owners have with the investor owned firm.

User-owners must share similar preferences on a greater number of items because they must be willing to agree on a broader menu of issues than an investor-owner. The user-owner must agree on the product and services of the firm as well as the quality, price and variety of these services. The investor-owner is likely to share greater diversity of preferences with respect to product characteristics because the criteria for becoming an investor owner is more likely to be limited to the rate of return and risk of investment. Preference similarities among user-owners is likely to result in shared attitudes and lower cost mutual adjustment. If investor-owners were called to agree on the menu of services in any one organization to the extent that user-owners are they would have much greater costs in reaching a consensus. User-owners share more points of interdependency with other user-owners than investor-owners share with other investor-owners.

Voting rules of user and investor owned firms reinforce the type of **interdependency** among members and between members and the organization. The one-member-one-vote rule allows for the maximum of political participation because of the equal weighting of each member's vote. Voting rights based on patronage encourages patronage of the user owned firm services, but could skew the vote to the larger operation although still within the sphere of some common product quality, price, and variety preferences.

Voting per shares owned in an investor owned firm offers the possibility of aggregating votes in one or a few members. To the extent that ownership is concentrated in one or a few investor-owners; fewer members comprise a majority. Majority coalitions are less costly to form and voting costs are potentially lower. The market for shares provides a low cost alternative mechanism (i.e. exit) to the more costly political process in directing the behavior of the firm (Hirschman, 1970; Van Ravenswaay, 1982).

Researchers like Marris and Mueller (1980) and Yarrow (1976) have studied the use of market mechanisms as a disciplining tool used by investor owners to control managers of investor owned firms. In the case of user owned firms disciplining is more likely to take the form of political action, mutual adjustment or social pressure because of the interdependency and interaction between member and firm. User-owners must agree on issues. Disagreement on only a few issues may not be enough to cause a user to exit. Investment in the consensus already achieved may prompt them to exercise their "voice" option (Williamson 1963; Baumol, 1959; Hirshman, 1970).

Because user ownership rights result in members that are more interdependent and interactive with the management of a user owned firm the manager would be called to fill more **interpersonal roles.** Interpersonal roles include being a **figurehead** that represents the values of the organization to the association and to outsiders, being a **liason** between owners and the work organization, and being a **leader** that motivates, staffs and directs the organization especially in matters of conflict or ambiguity. The manager of a user owned firm would also be called to the decisional role of negotiator when conflicts in member preferences were irreconcilable with firm capabilities. As the number of owners increased, resolving conflict through the interpersonal role of leadership would be more evident. (See Figure 1.2, "Eleven Managerial Roles.")

Investor ownership rights result in members that are less interdependent and interactive with the firm. The manager of an investor owned firm would be called to serve more **informational roles** for the membership; **monitoring** the operation of the firm and **disseminating** information to the stockholders that would allow them to evaluate their investment relative to other investment opportunities. Decisions made by the manager would be less dependent upon the investor-owners; the possibility exists to make two separate decisions for customers and investors because they are two separate groups of people (unlike in a user owned firm). There are fewer contingent criteria required for decision making. In the decisional roles the manager of an investor owned firm is more likely to be the **entrepreneur** who seeks out new investment opportunities for investors. The manager of an investor owned firm is less tied to any one industry or output.

3.4 Limited Return to Capital/"Nonprofit" Operation Ownership Principle

A second set of ownership principles that distinguishes between user and investor owned firms is the rate of return to equity capital and profit vs. nonprofit operation. This set of principles has implications for how the stream of benefits flowing from the organization is directed to owners. As shown in Table 3-2, investor owned firms operate on a profit basis provide investors the opportunity for return to equity capital that is not limited by bylaw. User owned firm operations are "not for profit" and limit the return to owner equity capital. These rights reinforce the same results as under member ownership and control principles.

"Nonprofit operation" does not mean that the user owned firm does not generate profits but rather that profits generated by the operation are **directed back to the users.** Some of these returns are immediate, such as lower prices paid or higher prices received by members, others are intermediate or long term such and received as patronage refunds. For-profit operations direct returns to investors without requiring patronage. Lower prices paid or higher prices received by the firm are returned to owners in the form of dividends and/or appreciated stock value.

The nonprofit motive also changes the cooperative's decision criterion from being solely profit to the multiple considerations of price,

TABLE 3-2. Ownership Principles and Manager Roles

	Behavioral Effects on the Owner-Manager Relationship	
	Investor	Cooperative
Ownership Principle		
Owner Right (Exchange) vs. User Right (Patronage) Limited vs. General Decision Right Incremental vs. Instrumental Investment	less interdependent, less interactive, and less democratic (owner association)	more interdependent, more interactive, and more democratic (owner association)
One Share vs. One Person Voting	market discipline	voting/patronage discipline
Owner Benefit Rights		
Profit vs. "Non Profit"	less multiple objectives	more multiple objectives
Limited vs. Unlimited Return to Capital	market product and finance focus	owner production focus
Managerial Roles	Informational Monitor Disseminator Spokesman Decisional Entrepreneur	Interpersonal Figurehead Leader Liason Decisional Resource Allocator

product, quality and variety of services. Investor-owners are more concerned with the return on their investment whereas user-owners are concerned with the price, value and "fit" of user services to their own farm operation. Multiple objectives increase the probability of conflict in decision making. Furthermore, members' goals may diverge or contain whole value sets whose elements have no recognized priority or common denominator (see Arrow's impossibility theorem).

The introduction of multiple and intangible objectives can raise the cost of decision making, resulting in a broader range of factors being considered, creating another reason for more democratization in the user-owner association in comparison to investor owned associations. Without the justification of a simpler profit rationale, other considerations of the effect of a decision on the owners would have to be made. When the effects of the decision are not clear cut, some aggregation of user preferences (a vote) would have to be made. This would increase the democratic interaction of the owners with the management. When political approval is routine, as in the case with budgets, the costs of political control "tend to be lower and the extent of such control correspondingly higher" (Roberts, 1975, 423). To the extent that political approval determines the outcome of intangible valuation in a user owned firm, we would expect to find mechanisms of member participation in the decision process such as greater frequency of voting, committee participation and responsibility that are found less in investor owned firms.

The limited return to capital principle constrains the return to equity capital and enhances the benefits of patronage. Because the user owned firm is oriented to the interests of users it limits the cash return on equity capital. The low return is of little interest to outside investors. The focus of the manager of a user owned firm would be the user's farm production as opposed to the profitability of the firm, or nonrelated investment opportunities.

Investment with high value added might even be avoided in order to not place strains on the user coalition in deciding how venture returns indirectly related to member production should be divided (e.g., by patronage, by vote, or by amount of capital invested). According to March and Simon (1958), "bargaining almost necessarily places strains on the status and power systems in the organization... Furthermore, bargaining acknowledges and legitimizes heterogeneity of goals in the organization" (March and Simon, 1958, 131). They hypothesize that the central hierarchy will perceive and react to conflict as though it were in fact individual rather than intergroup conflict. Furthermore, disputes will be defined in terms of problems in analysis versus problems in reconciling opposing values and bargaining will be concealed within the analytical framework. The manager is a focal point of negotiating agreement between members and the organization. Increased interaction and the requirement of member's approval will give the manager a production orientation as opposed to a marketing or finance orientation.

The manager of an investor owned firm is not constrained by a principle of limited return to capital. He is able to be more of the entrepreneur in deciding how to expand the business or invest in entirely unrelated industries. To a good extent the manager would be limited by experience with a certain industry but the point is that the possibility for other investments would influence the manager's decisions. The profit criteria gives a more simple measure of evaluation that the manager must satisfy than user price and value criteria. After meeting the criteria the manager of an investor owned firm has discretion as to how to invest the resources of the firm. The combination of the well defined profit evaluation system and potential rewards from unlimited return to capital of the owners' investment is likely to give the manager of an investor owned firm a financial focus and call for more financial market expertise as opposed to the farm production focus of the user firm manager.

3.5 Summary

Ownership principles impose control over the manager and shape the interdependence and interaction between owners and the manager. As a result of easily transferred ownership, limited investor obligation to finance incremental investment and not actively including owners in management decisions, investors and the manager are less interdependent and less interactive. The role of the investor manager is distinguished by the informational roles to monitor and disseminate the earnings health of the firm to the investor so that investors can evaluate their investment position relative to other opportunities in the market.

To the extent that user ownership is not transferable, owners are obligated for the debts of the user firm, investment is instrumental and fixed, owners are actively included in some types of management decisions, the user-owners and their manager are more interdependent and more interactive. The role of the manager of the user owned firm is distinguished by the interpersonal role of serving as a **figurehead** of user values, a **liason** of user concerns, a **leader** and a **negotiator** in bringing together differing user preferences. The tighter interdependency gener ates a higher degree of interaction and lowers the cost of coalition building through pre-selection of areas of agreement on cost and value of services; i.e., lower goal congruity and higher performance ambiguity.

The principle of nonprofit operation directs the benefits of the organization and results in a greater degree of interdependence. The principle introduces a greater number of objectives making performance evaluation and control of the organization more costly. Multiple, intangible objectives create more reason for interaction in the firm decisions and reinforce the interpersonal roles of the manager. The manager is also called to exhibit **leadership** behaviors to reinforce the common values of the organization and to provide direction when member conflicts with organizational activities would otherwise result in a standoff. The limited return to capital principle enhances the return to patronage and tends to give the manager of a user owned firm a user production focus as opposed to a marketing or finance orientation.

The profit operation principle provides a more measurable performance evaluation and control criteria for the manager. After satisfying the profit expectations of the owners, the manager of an investor owned firm has discretion as to how to direct the investment of the firm. With unlimited return to capital and less dependence upon owners, the manager is able to be more of an **entrepreneur**, attracting capital, expanding, or entering new industries in search of greater profits at reasonable risk levels. With a well defined profit criteria and potential rewards from unlimited return to capital, the investor manager is likely to have more of a financial market focus as opposed to the farm production focus of the user firm manager.

CHAPTER 4

THE SIMPLE STRUCTURE

4.1 Introduction

The nature of work tasks and the environment was developed in Chapter 2 and the impact of ownership principles was developed in Chapter 3. In Chapter 4, we look at managerial behavior within a simple dynamic environment where control of the work organization has become highly centralized under the direct supervision of the general manager. Within this context we compare managerial behavior in user owned firms with managerial behavior in investor owned firms. We assume a smaller owner association also because of the limited capacity of the simple structure to service a large owner association.

4.2 The Nature of the Task and the External Environment

In the simple structure, all authority, information, coordination and decision making is centralized in the general manager; the characteristic mechanism of work coordination within the organization is direct supervision by the manager. It is useful to think initially of the enterpreneurial firm where the general manager is also the sole owner who manages and directs the firm. Because one person controls the decision making process in the work organization, the decision process is both informal (fewer written procedures and arrangements) and flexible. This work organization thrives in an environment that is dynamic (rapidly changing) and simply understood enough to be under the direct supervision of one manager. Variations of this structure can be seen in many organizations but its limitations should always be clearly in mind; small numbers of employees, loosely regulated technology, simple environment, and loosely coupled work process; otherwise the manager would be overwhelmed by the information needed for coordination of organizational work flow.

The simple structure establishes the manager as the central figure in all decisions governing the flow of work, authority and information within the work organization. All decisions potentially cross the manager's desk and all resources are potentially accessible to the manager to negotiate conflicts in preference and belief within the work organization.

4.3 The Impact of External Ownership

The centrality of the manager in making decisions in an investor or user owned firm is not just determined by the environment, nor is it determined predominantly by the manager--as in the entrepreneurial firm. The role of the manager is also governed by the owners he or she serves and the rules of the constitution and bylaws agreed upon by the owners. The relationship established by the association opens the way for owners to influence the decisions of the manager through mutual adjustment, i.e., appeals, threats, coalitions and socialization of association values. Centrality makes the manager a prime target for the informal influence efforts by owners.

The manager is also constrained by the formal coordinating mechanisms set out in organizational legal forms, i.e., the board of directors, organization policy, reporting requirements and job description. These mechanisms make the decision process in the work organization of the simple structure more formal than that of the entrepreneurially owned firm. Formalization makes the organizational decision processes more consistent (Roberts, 1975; Mintzberg, 1979). Formal decision processes, combined with centralized supervision under the manager allows owners to exert control over the behavior of the work organization. By control we mean the degree to which owners are able to influence one decisional outcome to be consistent with the next.

4.4 The Impact of User and Investor Ownership Principles

In Chapter 3 the impact of user ownership principles was hypothesized as creating more points of interdependency both between owners and the work organization and among owners. User-owners were hypothesized to be more interactive with the work organization and exhibit a greater degree of democratic behaviors in their member association.

The distinctive effect of ownership principles is hypothesized to be maintained in the simple structure organization for several reasons. In a simple environment, the owners would be able to understand more of the decisions of the work organization. Ordering the multiple objectives of the user association would pose less of a problem if the owner association were smaller and if the manager was socialized in the values of the owner association through mutual adjustment. User-owners would have direct access to the manager and the decision process because of the centralization of control in the manager and the simplicity of the organization. The manager would have direct feedback and knowledge of user-owner preferences. Appointing the manager from the owners might reinforce the common values of the owner association.

The manager of the user owned simple structure would tend to emphasize the **interpersonal roles:** figurehead, leader and liason. The manager would be likely to maintain an owner production focus. As a leader the manager would tend to be the best example of association values.

The manager of the investor owned firm would tend to emphasize the **informational roles:** monitor, disseminator and spokesman. This is because the difference in ownership principles is hypothesized to be maintained in the simple structure. A smaller investor organization would probably be more informal and personal. This might allow mutual adjustment but there is less incentive to do so because there is less interdependence created by investor ownership principles. The manager of an investor owned firm would be able to fill more of the **entrepreneurial** decision roles because of the fewer points of interdependency between the manager's decisions and the investor owners.

The acquisition of capital is an especially critical problem for many small businesses. User and investor owned firms have different advantages for overcoming this chronic problem. The investor firm is not limited to a rate of return on capital and can attract sufficient capital by engaging in endeavors with a sufficiently high return. The use of debt leverage to enhance the return to investor owners offers another attractive opportunity. Alternatively, the investor owned firm could diversify its investments.

User owned firms restrict the return to capital but can capitalize on the greater interdependency between firm and owners. One possibility for a supply cooperative is to price at above market prices and return a greater amount to users through an enhanced patronage refund. This pricing mechanism provides an exclusion mechanism (Schmid, 1978) that keeps nonmembers from taking advantage of owner benefits. It also allows the firm to command a greater cash flow during critical production periods and generate a greater return to user owners in the long run. The patronage refund is a key means that the manager has to demonstrate the benefits of the organization. The user-owners would be better able to tolerate a marginal increase in their capital risk and approve the pricing scheme because of their already greater interdependency.[1] A user owned firm would not be likely to diversify as much as an investor owned firm, because of interdependence with a user-owner's high capital commitment to the production of a commodity that is probably constrained by climatic, legal, market, ecological, institutional and financial commitments (Harsh et al., 1981, 151).

The following study suggests that the management of a user owned firm may lack financial market expertise to their own detriment. According to our analysis, the manager of a user owned firm would tend to have more of a production focus whereas the manager of an investor owned firm would tend to have more of a financial market expertise. Financial market activity includes searching the market for alternative investment opportunities, competition, and sources of capital.

> The ability to acquire capital at reasonable cost is suggested by many financial experts as a constraint to growth for cooperatives. The problem stems from several sources. First, concern exists throughout much of the economy about a potential capital shortage. Second, cooperatives have traditionally had fewer alternative funds than noncooperative firms. Third, cooperatives have relied almost solely on one source of funds--the Banks for Cooperatives--for their long-term borrowing needs. Fourth, a lack of financial expertise has existed in cooperatives. Fifth, and most important, members generally have been reluctant to invest adequate equity capital in their cooperatives, or officials underestimated members' willingness to provide such capital. (USDA, ERCS, CRRS 9, March 19, 1979, p. 25.)

[1]For a marketing cooperative the parallel pricing scheme would be to offer the producers lower initial prices or delayed payments.

4.5 Summary

The impact of user and investor ownership principles are well differentiated in the simple structure because of the centralization of control and the opportunities for direct contact between the manager and the owners. Because of the simple environment, owners are able to understand and evaluate the operation of the firm. Managers of investor owned firms would tend to emphasize the informational and entrepreneurial roles while managers of user owned firms would tend to emphasize the interpersonal roles.

The acquisition of capital is an especially acute problem for these small businesses that investor owned firms are hypothesized to approach through expertise in the financial markets and user owned firms approach through the joint action of their owners. The limitations of the simple structure should be kept in mind: small numbers of employees, loosely regulated technology, simple environment, and loosely coupled work process; otherwise the manager would be overwhelmed by the information needed by the work members for coordination of the organization work flow.

CHAPTER 5

THE MACHINE BUREAUCRACY

5.1 Introduction

The machine bureaucracy examined in this Chapter is characterized by the standardization of work rules in a simple, stable environment. The factors of production, marketing and organization change only slowly. Coordination tends to rely on standardized work rules to a degree that greatly extends the coordinating capacity of the manager. Standardized work rules mean that work processes are broken into sequential well defined steps that produce the desired output. The existence of the machine bureaucracy implies that the owner association has operational goals.

5.2 Managers in a Machine Bureaucracy

The machine bureaucracy permits an enormous amount of control to remain in the hands of the general manager or management team. The work organization is specialized and functionally organized so that the strategic apex is the first level where all of the functions are integrated. Most resources and authority for managing conflict are located at the strategic apex. Conflicts among organizational functions are usually resolved at the strategic apex. Through levels of control and hierarchy of authority the strategic apex can control an enormous amount of resources. The strategic apex, however, is thoroughly dependent upon technicians that employ their expertise to the work of standardization. The technicians have no line authority but use their skills to operationalize the decisions of the strategic apex. Without the cadre of accountants, production engineers and production planners the work of the organization would grind to a halt. The dependence of the strategic apex upon the technicians acts as a technical constraint on the ability of the strategic apex to make autonomous decisions. The authority and the ability to direct the organization is divided.

The machine bureaucracy is readily distinguished by the way work is organized: specialized, clear division of labor, standardized jobs, and interchangeable workers. As long as there is available work force, the operation of the operating core is virtually independent of the workers who operate its stations. Control of work tasks is in the hands of the technicians who design its work flow, not the hands of the workers who perform the tasks.

Middle line managers are an integral part of the structure because of the need to integrate the highly interdependent and fragmented tasks of the operating core. The middle managers may also be functionally specialized in order to cope with the specialization of the operating core and the technicians. If the environment were not stable, the middle manager would be working in a pressure cooker of conflicting forces that he often has not the authority nor the resources to resolve. Then, his main function is to manage disturbance of production in the operating core. Conflict between workers or work processes must rise to the middle manager because the workers themselves have little control over their work flow. While the conflict is going on the middle manager must also respond to the technicians request for information and the strategic apex's orders for changes in production. Conflict that the middle manager cannot mediate rises to the strategic apex.

Another feature of the machine bureaucracy is the long and formal communication and control system. The manager(s) of both user and investor owned firms in the strategic apex are dependent upon the communication system to bring them information on the operation of the organization. They do not have the time to directly supervise each operation and must devise standard reporting procedures that will provide them with the information they need. The information is aggregated, summarized and filtered through many layers of authority before it reaches the strategic apex. By the time it reaches the strategic apex it is often too late. Anything outside of the standard communication could be lost in the communication system because of its already high volume and highly structured content.

A manager's attention is selective in determining what information is required and how it could be obtained. Current, unfiltered, unaggregated information must be gathered in determining the cause of production disturbances. Top managers tend to be isolated from the day to day work of the organization. Combining their isolation with the degree of intervention that is necessary (due to the specialization and fragmentation of information and authority within the organization) puts management at a disadvantage, having to deal with problems without the necessary information. Unresolved conflict within the organization can induce further isolation of the strategic apex from the rest of the organization.

Another effect of the isolation of the strategic apex is the opportunity for subunits to fill their subunit objectives in such a way as to diminish the overall progress of the organization. Interdependent departments can become rivals in terms of shared resources and compete for influence within the organization in order to fill their formal objectives or informal objectives of the subunit manager. March and Simon (1958, 36-45) describe how the informal organization can produce organizational dysfunctions despite formal procedures.

In essence Mintzberg (1979) concludes that the machine bureaucracy performs well under certain conditions: simple stable environment, tight specialization of the organization, formal communication system, and a powerful but isolated strategic apex. When the environment changes or if anything more than the routine work flow is required of the strategic manager then the control of the work organization by the strategic manager is likely to prove more illusory than real. In the same vein, Hunt (1970) describes the machine bureaucracy as a "performance and not a problem solving organization."

It seems evident from our description of the machine bureaucracy in an unstable environment that the manager's role would be pulled towards being a **disturbance handler.** The decisions made by top managers at the top of the organization are likely to be concerned with immediate structural conflict within the organization. Managers at the top of the organization are more able to exercise autonomy in decision making for the organization. However, the ability of the strategic apex to make these decisions is heavily influenced by the technicians and the formal communication system.

5.3 The Impact of External Ownership

The machine bureaucracy affords a measure of formal owner control over the work organization as long as owner goals can be operationalized. Mechanisms of owner control include **direct supervision** (holding the general manager responsible for the actions of the organization) and

standardization of work rules (imposing clearly defined standards on the work organization). In a simple and stable environment there is little or no conflict. Managers build up organizational slack, extra resources and influence within the organization that can be brought into play to smooth any production disturbances (Liebenstein, 1979; Williamson, 1975). In this environment, the work organization would be able to meet the performance standards imposed on the work organization by owners.

In a dynamic or hostile environment, however, the substantive control that the machine bureaucracy affords the owners can be circumscribed by: (1) the isolation of the strategic apex; (2) the inflexible formal communication system; (3) the technological constraint of operationalizing organizational goals; and (4) the need for the organization to deal with internal conflict. In this environment, the manager's attention is focused on situations of immediate internal crisis. The more regulating and specialized the technology and work flow, the more disturbance handling would consume the manager's attention.

With the introduction of standardized work rules the capacity of the organization to provide more services to greater numbers of customers is increased. The manager can coordinate a larger number of workers. One constraint on the ability of the work organization to serve a larger owner association, however, is the degree of conflict in the operational goals of the association. Greater numbers of owners would probably lead to greater goal diversity and conflict. As greater conflict in operational goals is imposed on the work organization the ability of the machine bureaucracy to meet any owner objective is lessened. The owner association has three possibilities: (1) remain small; (2) grow large but limit association goals and interdependence to operational goals;

or (3) enforce goal congruence in the large owner association through eligibility rules or socialization. With the increased numbers of owners the costs of owners being interdependent become higher. Each individual owner has less opportunity to hold office and to influence the decision process within the member association directly (Caffereta, 1982). The greater the number of owners the higher the costs to organize and the lower the marginal benefit to the individual owner of such efforts (Schmid, 1978, 48; Olson, 1965, 24). As the owner association becomes larger the number of points of common interdependency become fewer and the return to the owner of influencing the association decreases.

If the owner has fewer opportunities to influence the organization individually there are still mechanisms of collective action that can maintain the interdependence within the association. Owners can build coalitions within the association that in effect establish subaggregations of points of interdependency and agreement. Coalitions can be joined or disconnected with other coalitions according to the points of interdependency and agreement that are addressed by the issue or the owner association representative to be influenced.

5.4 The Impact of User and Investor Ownership Principles

One possible prediction for the machine bureaucracy is that investor owned firms are more likely to have many members than user owned firms because investor owned firms have more operationalizable goals. User ownership principles create a greater degree of interdependence between the owner and the work organization and more complex goals. This prediction would also depend on the degree of conflict in operationalizing owner preferences in the work organization. To the extent that investors are less interdependent and have fewer conflicts over operational goals they would be able to control a large machine bureaucracy even with a large owner association.

Yarrow (1976) studied the threat of a stock takeover and investor coalitions as major disciplining mechanisms that investors used to curb managerial discretion from noninvestor objectives. The separation of ownership and control in the investor firm has been a popular subject of debate. The takeover would occur if the performance of the firm fell below some minimum level. Shareholders with sufficient buying power would buy a majority interest and oust the management. The threat of takeover focuses the manager on investor measures of performance. Concentrating on a few formal measures of performance can have unexpected side affects such as sacrificing long term profitability for short term performance, maximizing returns to the detriment of other objectives such as product quality, and the focus of the manager on the biggest shareholders as the most immediate threat. Since investor owners do not necessarily have contact with the operations of the organization, the major source of their evaluation probably comes from the reporting required of the financial manager and market evaluation of the earning of the firm. This reinforces the informational roles of the manager.

The fewer points of interdependency between the investor and the machine bureaucracy would also allow some flexibility for the manager to deal with conflict within the organization. As long as the information and evaluation measures are met, the manager can use the work organization's resources to negotiate conflict within the organization.

In order to make effective the impact of user-ownership principles on the work manager, control mechanisms other than the takeover threat by owners must be employed. First of all, ownership cannot be exchanged by owners so there is no legal way that a majority of shares could be purchased. Secondly, the presence of multiple profit, price and service objectives would be more difficult to measure by owners to evaluate the operation of the firm. One such control mechanism that might be used is the socialization of managers. This may be accomplished by choosing a manager with the same attitudes and values as the members or by indoctrinating new managers in the values of the association. Interaction with users would reinforce this socialization and emphasize the interpersonal manager roles.

Socialization of the managers by the owners may have its drawbacks, however, in weakening the strong control system that is needed by managers to maintain the machine bureaucracy. The stronger the control system in a work organization, the more impact the values and beliefs of the top management will have on the work organization's choices if top management so chooses (Roberts, 1975, 420). As long as the multiple objectives can be rationalized within the limits of performance that the machine bureaucracy was designed to do, the values of the association can be expressed through the strong control system of the work organization. However, if the control system is weakened by internally regulated control through socialization, it could be difficult for management to alter the organization's choices. Negative performance such as overmanning and failure to minimize costs in routine operations may occur (Roberts, 1975).

If the user-owner association were to grow large, we would expect to see mechanisms offsetting increased goal incongruence brought about by the increased number of owners. One mechanism is to decrease the degree of interdependence. This option would bear the cost to owners of lessening differences brought about by the user versus investor ownership principles. Other mechanisms which would act to moderate increased owner goal conflict would include using eligibility rules to preselect user owners and socializing the managers in the values of the user association. Coalition building and membership administration are also mechanisms of generating greater goal agreement.

To the extent that user associations maintain more points of interdependency than an investor owned firm we would expect to see more coalition activity. Because the manager of the user owned firm is so influential in the machine bureaucracy, the coalitions would try to influence the manager directly through mutual adjustment. The direct contact of user coalitions with the manager of a user owned firm would result in an emphasis on the interpersonal manager roles. In addition, with the increased diversity of points of interdependency with the user-owners, the manager would also have to negotiate some of the conflict between owner coalitions or at least between the interests of the coalition and the work organization.

Another mechanism that could maintain the degree of interdependency within the user owner association is the member-administration, member-education function. As the association becomes large, the association becomes more formal, and relationships become stable and predictable. Formal relationships also tend to insulate the organization from change by stabilizing organizational relationships. However, even within the larger user owner association we would expect that the quantity and content of the information communicated to members to vary significantly from investor owners in the degree of its complexity, operation specific detail and user production orientation.

The degree of interaction between the association and the work organization can also be examined through the composition of the board of directors. The technical expertise needed by directors to understand and guide the machine bureaucracy would limit many individuals from being elected to the board. The work organization would prefer the board to be made up of technically skilled individuals who would be able to understand and decrease risk associated with major actors such as financers, potential takeover competitors, suppliers, etc. The owner association would prefer to have their views represented on the board. If user owners are more interactive with management, then one would expect the board of a user owned firm to reflect the owners more and the board of an investor owned firm to reflect the critical uncertainties facing the work organization.

5.5 Summary

The machine bureaucracy extends the ability of managers to coordinate large amounts of resources and personnel in pursuit of owner goals. The machine bureaucracy works best with operational goals, however, and would be paralyzed by goal conflict in a large, closely interdependent owner association. Because user ownership principles create greater interdependency, the owner association can remain small or else engage in distinctive mechanisms that mediate owner goal conflict. Otherwise the degree of their interdependency is lessened. The investor owner association is more likely to grow large because of the lesser degree of interdependency created by investor ownership principles.

The machine bureaucracy operates best in a simple stable environment. Conflict in operationalizing owner goals is one source of instability that the machine bureaucracy is not well adapted to handle. In an unstable environment the manager of the machine bureaucracy must be concerned with the role of disturbance handler within the firm because of the specialization, fragmentation and formalization of information which effectively isolates top management from the rest of the work organization. To the extent that the standardization of work and the coordination of the top management provides external control, the manager of an investor owned firm is called to fulfill the **informational roles** that helps investors to manage their investment. Further substantive control by owners is necessary if the multiple objectives of user ownership principles are to be made effective. Factors aiding this control are: a tighter degree of interdependency, coalition building, membership administration, member education and effective communication to allow substantive voting. To the extent that this further degree of control is actualized the manager will engage in the **interpersonal roles** of membership administration, liason, and leader.

Differences between managers of user and investor owned firms can be overwhelmed by the conditions of the machine bureaucracy: (1) the isolation of the strategic apex; (2) the inflexible formal communication system; and (3) the need for the general manager to focus on conflict within the organization. Strong control by management is necessary for the operation of the machine bureaucracy. Ideological control is necessary for the multiple objectives of the members to be actualized in the decisions of the top management, but this weakens the effective control of top management. Should the strong control system be replaced by ideological control and ideological control be overwhelmed by such factors as owner heterogeneity, conflict, costly coalition building, circumscribed communication and lessened incentive to coalition, then the user owners would be faced with significantly diminished substantive control.

CHAPTER 6

THE PROFESSIONAL STRUCTURE

6.1 Introduction

The professional structure coordinates work in a complex environment through the use of standard skills. A complex environment is one where the causal relationships of production, marketing and technology are not well understood. Work in a complex environment cannot be easily standardized, so professionals are used. Professionals are trained in a certain area of knowledge that allows them to perform a limited diagnosis to reduce the level of uncertainty. In addition to an environment being complex, we also consider an environment that is stable. This allows the professional's skills for diagnosing the environment environment to dominate because skills also tend to change only slowly. Mintzberg (1979) labels this organization, the professional structure. The nature of managerial behavior in this organizational type introduces the influence of complexity on the impact of ownership principles on managerial behavior.

6.2 Managers in a Professional Structure

Organizations serving farmers in complex tasks use standardized skills to coordinate the work. Some of these professions include agricultural engineers, animal scientists, crop and soil scientists, agricultural economists and lawyers. The key here is the critical area of uncertainty that the skill of the professional is trained to diagnose. One of the great areas of uncertainty facing farmer production is the interaction of supply and demand in the market. Mediating the uncertainty in the market is a source of influence for the professional within the work organization.

The operating core has a major influence on decisions within the professional work organization. In effect, professional operators work with considerable autonomy in a client-user relationship that is only somewhat controlled by the strategic apex or by the standardization of rules. The influence of managers in the strategic apex on work decisions is diminished. The strategic apex is influential only so far as it provides valuable support and coordination services for the professionals in the operating core. In fact, the introduction of strong direct supervision or standard decision rules by top management can inhibit or negate the advantage of having professional skills in the first place--the specialized knowledge and analysis that the professional brings to the task. In effect, professionals in the operating core act to a great degree as their own managers with minimal interference from the administrators. The structure is bureaucratic without being centralized.

6.3 The Impact of External Ownership

There are several important features of the professional structure that come into play in the way work is coordinated in the organization. First, the diagnosis of market problems by professionals is limited to their specialization. The diagnosis is not general but specific to a set of conditions and problems. Professional training provides a "screen" for professionals that limits the types of information and decisions that they are likely to consider. This also acts as a barrier to the initiated, or in our case the owner, being able to understand the work of the organization. Economists study economic decisions and management theorists study organization decisions, yet these two are closely interdependent. Only in the most rapidly changing complex environments, such as high technology, are professionals of different disciplines thrown together and forced to deal with analyzing whole tasks as a team.

The skills of the professional are learned in school or in practice. The ability of the top managers to coordinate the work of the professionals rests not only on bureaucratic rules but also on the standardization and underlying values of their training. Professional associations and societies regulate the quality and content of professional training and promote professional values through meetings, journals and recognition of individual achievements. The importance of learned skills may make direct control of the work organization by owners more difficult. The more important the skills of professionals, the more owners must depend on them to mediate uncertainty. Owners can influence professional decision making indirectly by affecting the values and discipline of professional training. Direct control of the professional by owners may hamper the application professional to apply his skills.

The process of administration within the work organization tends to be somewhat more democratic--among equals. The decentralized and democratic process within the work organization is more accessible to individual owner preferences and problems outside the work organization. The barriers to owner influence in the decision process would not be isolated managers, as in the machine bureaucracy, but rather technical jargon. The professional analysis techniques used by the staff might hinder owners from understanding the decision process.

Because of the autonomy of the professionals in the operating core external ownership is limited in the exercise of direct control over the work organization. The loyalty of the professionals to the work organization can be swayed by their professional allegience - away from the organization. This enables the professionals to take their universal skills and plug into another organization; in effect making the professional more independent of the organization and dependent on the profession for advancement and recognition. This independence can circumvent the control which managers and owners can exercise over the professional. However, the door for specialization or ideological control is also open. Ideology would make the outcomes of decisions made by professionals more consistent with owner preferences by affecting the values underlying basic analysis.

This limitation of control by managers and owners over the profession suggests an interesting and rather circular hypothesis. Managers in user owned and investor owned firms are different if the professions and schools they are in say that they are different. This difference would be manifest in the types of analysis, values and approach taken by the professionals in the investor owned firm versus the user owned firm. The following citation suggests what a difference ideological or philosophical differences can make in organization behavior.

> Philosophical differences, personality differences, and ties with general farm organizations were considered as serious constraints to growth (of cooperatives) through merger. (USDA, March 1979, p. 24).

6.4 <u>The Impact of User and Investor Ownership Principles</u>

Because professionals can act independently of the organization one could consider them as their own manager despite working within an organization. For clarity of analysis, the relationship of the professional to the user can be described in three levels in a cooperative marketing context: the market service agent, the exclusive agent, and the full marketing cooperative, as described by Bunje (1980).

The first type, the market service agency, is often the forerunner of other more developed associations. This type of organization provides market supply and demand data to its users. The organization does not take title to the goods and does not engage in direct bargaining with buyers to sell user products. The organization maintains contacts with traders to keep current with marketing and buying developments on behalf of users. This type of organization shows the least amount of interdependence and interaction between the user and the professional. The professional has only limited obligation to the user and can pursue behavior that is advantageous within their profession but perhaps detrimental to the organization.

van Ravenswaay (1980) describes three types of professional career behaviors in a Federal government agency operating in a complex environment. The agency had actors with diverse interests and operated under a vague mandate. Some of these professional behaviors include: (1) "leapfrogs" who jump from organization to organization on the basis of how it advances their career; (2) "crusaders" whose overriding values determine their course of action more than the organization or their profession; and (3) "bureaucrats" who attend to the workings of the organization in order to achieve security and recognition within the organization. The means of control available to the central administrator over the professional was through allocating desirable assignments. From van Ranvenswaay's (1980) analysis it is evident that there are a variety of behaviors that can occur within the professional structure. A diversity of these behaviors is likely in the loosely interdependent market service agency.

The second type of marketing relationship is the "exclusive bargainer." This type encompasses all variations of the exclusive agent. The work organization contracts with users to bargain or negotiate prices and terms of sale with buyers on behalf of the users. Under this arrangement the farmer still retains title and contact with the buyer. The user retains a certain amount of freedom in choosing the buyer. The essentials of price and terms of sale set by the cooperative are a subject to modification by the user. This arrangement produces a mixed degree of interdependence between the user and the work organization depending upon the terms of the user contract with the firm. The users are free to contract or not to contract with the cooperative and are able to set liberal or constraining terms depending upon the situation. In other words, the user and the firm mutually determine the degree of interdependency they desire to enter into with each contract.

The "market service agency" and the "exclusive agent" type cooperatives do not create a high degree of interdependency between the cooperative and the user, except for a specific time and purpose by contract. Even though organized under user ownership principles, there is nothing in the nature of the task structure that implies that a user could patronize or not patronize the services of the cooperative in the same way that a customer would patronize or not patronize an investor owned firm. Producer customers subscribe to investor owned market service organizations without further obligation; obligations end with each contract between producer and agent. Without greater interdependence between user and work organization, the managers of a user owned and an investor owned firm would be distinguishable in the service agency and exclusive agent firm. Under both forms of ownership the manager would serve sellers in **informational roles** as a **monitor** and **disseminator** and in decisional roles as contract **negotiator** and **resource allocator** for the work organization and for seller's accounts.

The third type of marketing organization is likely to result in different managerial roles in the investor owned and user owned firm. The "full marketing cooperative" takes title to the goods, combines them into a common pool(s) and negotiates the prices and terms of sale. Growers receive the average return from the pool and are guaranteed a market for their produce. Multiple pool systems are operated to differentiate grower produce in terms of contracted and uncontracted variety, location and quantity (Bunje, 1980). Here user ownership creates a higher degree of interdependence among the central administration, the professionals, and users.

The tighter degree of interdependence between the user and manager of the work organization produces a unique set of benefits and responsibilities for the marketing manager of a user owned firm.

> A marketing type association enjoys greater flexibility and can develop greater bargaining power than any of the other types of bargaining associations. It also imposes greater disciplines on the members and requires maximum skills of management and strong dedicated grower leadership.
>
> Marketing type associations tend to become institutionalized more rapidly than any of the other types of bargaining associations. This is primarily due to the responsibilities imposed on the association to market all of its members' production. The association also has the opportunity to become a reliable source of quality production for the buyers. (Bunje, 1980, 460, emphasis added.)

This greater degree of interdependence among users and the work organization would force the manager to interact with users more in terms of interpersonal roles such as **figurehead, leader** and **liason.** Managers within the work organization would pull to centralize and bureaucratize the work flow in order to meet its greater need for coordination. The role of the central administrator becomes more important in order to ensure more consistency in the work of the professionals in the operating core. The potential for conflict between professional incentives and organization incentives however, still arises (van Ravenswaay, 1980).

The full marketing cooperative would be more likely to differentiate between user and investor principles than the marketing service agency or the exclusive agent. Farmers or investors would probably not subject themselves to the risk of pooling unless there were contractual guarantees. It is more likely the investor organization would take title to the goods under contract and not risk the close interdependence with users. The situation of having to market all of the users produce would not arise under investor ownership principles.

Socialization of the manager in user values could become more important in the complex environment. It is a mechanism of control that would not interfere with the skills of the professional. Indirectly, the firm could control professionals by training or by the influencing value structure of professional societies. The socialization of professional could occur both before and during their work for the organization. User and investor interests could be differentiated in the organization by the socialization of user values in the professional. Evidence from the literature shows difference in user and investor-owned firm's performance being maintained. As shown in the quote below, socialization of management seems to be an important control mechanism in cooperatives.

> Many cooperatives rely on promotions to management positions from within. Their philosophy is that they would rather have

> someone who knows from experience their organization and their cooperative philosophy. (USDA, EC and CS CRR 9, March 1979, p. 24).

6.5 Summary

The professional structure is unique in its use of standardization of skills as its primary coordinating mechanism. The professional structure thrives in environments of complex but stable relationships because it can bring a body of diagnosis and skill that has been learned over time to the task of coping with uncertainty in the environment. This learned skill enhances the importance of socialization and values in directing the work of the professional but it also prevents the owners from understanding some of the technical jargon and decision behavior of the professional. Learned skills make the professional independence more dependent upon the profession and less dependent on the organization. This independence diminishes the ability of the central administration of the organization to centralize and direct the organization, but again it enhances the role of socialization in standardizing decision outcomes.

The ability of ownership principles to differentiate manager behavior in user and investor owned professional firms depends upon the degree of interdependence between owners and the organization. The difference is increased by a tighter degree of interdependence between owners and the organization, a greater need for centralized coordination of the professionals, and a greater impact of control and socialization upon the work of the professionals.

Professionals are called to fill **analytical and informational roles.** Tighter interdependence such as they found under user ownership also requires active **interpersonal role** behavior on the part of the manager, i.e., figurehead, leader and liason, that is less required of the manager in the investor owned firm. The degree of interdependence of the owner and the organization is also highly influenced by the legal and work relationship between owners and the firm as determined by the contract or organization work role.

CHAPTER 7

THE DIVISIONALIZED STRUCTURE

7.1 Introduction

The divisionalized structure is characterized by the standardization of outputs. When the products of an organization become too diverse for coordination characterized by standard work rules or standard skills then divisionalization along product, service, client or geographic lines tends to be used. Two key features of the divisionalized structur to consider are the degree of centralization and the nature of the output performance evaluation system. The method of output evaluation is of key importance because it coordinates and communicates the standard for divisional outputs (Mintzberg, 1979).

Not all divisions are decentralized. The degree of centralization depends upon the interdependence of divisional **work flow** and the presence of **product diversity.** Tightly integrated work flow between divisions can necessitate the centralization of the divisional structure into a form resembling the machine bureaucracy. The first divisionalized structure such as the Du Pont Corporation in the 1920's grew out of a structure like a machine bureaucracy when products were diversified beyond the ability of the bureaucracy to coordinate them.

> "Instead of one integrated functional structure a set of them could be designed, one for each market. This eased the bottleneck at the strategic apex, calling for less centralization and less formalization." (Mintzberg, 1979, 386.)

A completely decentralized divisionalized structure such as a federation or conglomerate creates divisions that are very independent.

Conglomerately owned divisions are bought and sold by a holding firm to complete a portfolio of investments. Federations are common interest groups that can be joined or exited with minimal impact on each separate or collective unit. In this case, the divisions of a completely divisionalized/decentralized organization can appear similar to the simple structure where divisions could even be coordinated by a single manager through direct supervision.

7.2 The Divisionalized Structure Manager

The degree of centralization and the locus of control can lie with either the central administration or the divisional manager depending upon the degree of interdependence of **work flow among divisions** and the presence of **product diversity.**

Typical functions of the central administration are to: (1) design a strategic portfolio; (2) allocate scarce financial and managerial resources; (3) design performance control measures; (4) replace and appoint divisional managers; (5) personally monitor divisions; and (6) provide support services such as financial, legal, research and development and public relations. The central administration is concerned with owners, potential merger opportunities, financial community, and government agencies (Mintzberg, 1979, 388-392).

The divisional manager is in charge of executing the strategies of the central administration to tailor the product to the market, and to meet the performance criteria set by the central administration. The divisional manager focuses on his division and the market which it serves. The decisions which cross the division manager's desk concern the administration of the division, the market the division serves and the communications of the central administration--especially performance evaluation control measures.

Work Flow

When **work flow** among divisions is coordinated--production is sequential and one division is required to sell to the next division--highly centralized control over divisional planning and performance is necessary. This "integrated" form does not allow much independent decision making on the part of divisional managers and can result in a structure that could tend to rely on standardized rules in a stable simple environment like the machine bureaucracy.

As the divisions begin to sell more of their products to the market instead of to other divisions, more autonomy must be given to the divisional managers in order to allow them the flexibility to tailor their products to the market. As by-products and related products become more important, divisional managers gain considerable control over specific product-market strategies. Still, the central administration retains much of the strategic planning control by virtue of the common shared technology, core skill or central marketing theme that holds the divisions together.

When there are no important interdependencies among the divisions, the divisional managers exercise a greater degree of independence--even to the extent of making strategic planning decisions for their divisions. The central administration coordinates the use of any critical pooled resource. The divisional managers must respond to the performance control measures of the central administration although these performance control measures may lack the strength to make them effective. The central administration may have to rely on more subtle means of influence such as socialization of the manager for setting the organizational climate. In this environment, the divisions tend to be strong and the central administration headquarter's staff is typically small.

At one extreme the decentralized divisional structure becomes a conglomerate holder of diverse business interests or a federation of loosely coupled organizations. There may be little central planning save for the periodic meeting of chief executives. At this extreme it is probably less accurate to talk of one organization but many independent organizations.

Product Diversity

Product diversity increases the need for divisionalization. If the markets of an organization are geographically but not product diverse then the central administration is more likely to centralize and standardize. Each division operates separately but is guided by identical rules and guidelines. The managers of these divisions lack true autonomy outside of their responsibility for daily operations. Critical functions and strategic planning are carried out exclusively by the central administration. Dispersed markets, coupled with perishable products or high transport costs encourage the manufacturing plant, brewery, or dairy plant to exactly duplicate its operations in different regions.

The key to the effective monitoring of divisional performance through the evaluation system is a simple, stable environment that does not overwhelm the communication system with conflict and continuous need for change. Forced into a complex environment, managers could be extensively trained. This enhances the importance of socialization as in the professional structure. In a dynamic environment the central administration can rely upon frequent contact or direct supervision of the division managers in order to assure uniform outputs.

In summary, divisionalization usually exists by degrees. Studies by Harvard researchers suggest that these degrees are often sequential in the life of an organizations development. Pure divisionalization, however, requires loosely coupled divisions and product diversity. Divisional managers are responsible for strategic planning for their products and markets. Strategic planning and some control over pooled resources, such as financial, managerial, or marketing theme, is retained by the firm's central administration. Central administrators typically have a broad outward focus while divisional managers have a market focus, more so than if they were in independent organizations (Chandler, 1962).

7.3 The Impact of External Ownership

The "pure" divisionalized structure offers many advantages for external control in a simple stable environment. When the desired outputs can be identified and the relationships in producing the desired outputs are known and stable then the standardization of outputs provides a measure of control and freedom for managers to perform without unnecessary hindrances. The work organization is able to provide individual market attention while at the same time marshalling resources under a central administration. In a complex unstable environment, the divisionalized structure experiences the same difficulties the machine bureaucracy would because of its reliance on a formal communication system to evaluate the outputs of the divisions.

Mintzberg (1979) compares the divisonalized form with independent companies. Mintzberg's overall assessment is that divisonalization corrects some managerial and financial market imperfections but causes problems that are perhaps worse in terms of financial performance, managerial development and owner control.

> Pure divisonalization remedies certain inefficiencies in the capital market, but it introduces new ones of its own; it trains general managers but then gives them less autonomy than does the independent business; it spreads its risks, but it also spreads the consequences of those risks; it protects vulnerable operations during economic slumps, including some that later prove to have not been worth protecting; its control system encourages the steady improvement of financial performance yet discourages true business performance than does the board of the widely held corporation, but its inherent diversification is one of the causes of corporations being widely held and boards being ill-informed in the first place; and in the final analysis, it can do little more than a board of directors to correct the fundamental problems in a business--ultimately, both are reduced to changing the management. Overall, the pure Divisionalized Form (i.e., the conglomerate form) may offer some advantages over a weak system of boards of directors and inefficient capital markets; but most of those advantages would probably disappear if certain problems in capital markets and boards were rectified. (Mintzberg, 1979, 423.)

7.4 The Impact of User and Investor Ownership Principles

The impact of user ownership principles would be to reinforce the regional orientation of the division whereas it would be much easier for an investor owned firm to be drawn into a centralized divisional structure. Because of ownership and investment rights user-owners are more likely to be tightly interdependent and interactive with the user firm than investor owners would be with an investor owned firm. The standardization of outputs for the user members would enhance their ability to evaluate the performance of firm products. Interaction between user-owners and the manager would likely result in a regional orientation of divisions and a reduction in the influence of the central administration's control over the divisions.

With product diversity there would be even less incentive to the user-owner to advance the consolidation of resources into a central administration. The main incentives to centralize would come from the work organization to provide broadening and advancement opportunity for managers, to ease credit financial constraints, and to spread risk. User owners would be more likely to maintain control through fully division-alized (decentralized) divisions. The accounting complexity tying pa-tronage contributions to patrons would be enormous should the division grow too centralized.

> Independent organizations that join together to form new alli-ances--perhaps to benefit from economies of operating scale, or the sharing of financial resources or support services--but are intent on guarding as much of their previous autonomy as possible, naturally prefer the Divisionalized Form. These alliances, generally known as associations or federations, oc-cur when farmers create cooperatives to market their produce, when small construction firms do likewise to countervail such actions by unions or to meet the market power of larger compe-titors...When the federated organizations produce common pro-ducts or services, strong pressures naturally arise to consol-idate their activities into tighter structures--specifically to concentrate critical functions at the administrative head-quarters--and their divisionalized structures tend to be driven to integrated machine bureaucratic ones. (Mintzberg, 1797, 401.)

Investor ownership principles on the other hand, produce less de-pendence between investors and the divisional manager. There would probably be more standardization of outputs between divisions based on financial measurements for the following reasons. The interests of investor owners are not in particular products of a division but rather the entire business organization, therefore, they would not object to the further centralization in control of the organization if it meant that the profitability of the total organization would be enhanced. Investor owners would be unaffected if the division dropped an unprofit-able line. More than likely, investor owned firms would start with a target of probability and then determine product or service features whereas a user owned firm would be more likely to start with a particular product or service and then determine at what cost it could be done.

The investor owner may even have a preference for owning one conglomerate firm as opposed to the a host of smaller companies because of lower transaction costs. With the pull of owners to centralize and the priority of profit over product the divisional manager of the investor owned firm would be less able to resist the pull of the central administration to centralize control over the divisions than the user owned firm.

The divisionalized form would maintain the same behavioral distinctions as user and investor ownership principles. Managers of user owned firms who have more interaction with the user-owners and would be likely to exhibit more interpersonal behavior. A greater evidence of socialization because of the member firm interdependence. Managers of investor owned firms would emphasize informational roles with investors to convey the overall results and value of their investment.

7.5 Summary

The divisionalized structure is characterized by the standardization of outputs. The purely divisionalized structure is made up of loosely interdependent divisions sharing some common resource, financial, managerial or marketing theme. The central administration coordinates whatever resource is held in common such as finances, marketing strategy and managerial training support. The purely divisionalized structure is dependent upon a loosely interdependent **work flow** between divisions and the presence of **product diversity** in a simple stable environment.

The divisional structure lends itself to external ownership by central monitoring of outputs and by the autonomy it affords divisional managers in meeting the demands of their market. User ownership will produce decentralization and regionalization of the divisions whereas investor ownership could induce centralization of divisions. This is likely to produce an emphasis on the **interpersonal roles** roles of managers in the user-owner relationship and emphasize **informational roles** of managers in the investor owner relationship. If an investor owned firm is traded often, then the division manager would be able to exercise even more autonomy in entrepreneurial roles. Otherwise, the divisional manager would gradually become less autonomous and strategic planning taken over by the central administration.

The divisional structure remedies certain inefficiencies in the capital market but introduces new problems of risk, management, and control. These problems are somewhat offset by the greater interaction of user owners with the work organization. Mintzberg (1979) concludes that we would be better off correcting the market inefficiencies themselves.

CHAPTER 8

SUMMARY AND CONCLUSIONS

8.1 Conclusions

Managerial behavior is determined by the manager's internal psychological makeup--the manager's needs, traits, risk preferences, values and skills, and the work roles that the manager perceives are required of him. Since it is not likely that managers of investor owned firms and managers of user owned firms should differ significantly in these individual traits, only the situational determinants of perceived role requirements were developed in this study. Only so far as the situational determinants affected a manager's values were the individual preferences of the manager considered.

A manager's perceived role requirements are formed by: (1) the nature of the manager's task; (2) formal organizational rules and role descriptions; (3) informal role cues; and (4) performance evaluation and feedback to the manager on the manager's behavior and that of the manager's subordinates. The question of the impact of user and investor ownership principles directs our attention to the impact of formal ownership rules and principles--a second aspect of our model. Ownership principles impose control over the manager and shape the interdependence and interaction between the manager and owners.

1A) The first conclusion from looking at the impact of the principles of ownership on the manager is that we can expect the manager of a user-owned firm to emphasize different roles than the manager of an investor owned firm. Managers of user-owned firms are more interdependent and interactive with user owners and execute more interpersonal and leadership roles. Managers of investor owned firms are less interdependent and interactive with investor owners and would execute more informational and entrepreneurial roles.

1B) As a consequence of principles of investor ownership which allow easy transfer of equity ownership, limit the investor owner's obligation to further finance the firm, make the investment incremental to the owners other sources of income, and do not actively include owners in strategic management decisions, the manager and the investor-owners are less interdependent and less interactive. The role of the manager in the investor owned firm is **informational**. This role includes **monitoring** and **disseminating** information the earnings health of the firm to the investor owner so that investors can evaluate their investment position relative to other opportunities in the market.

1C) To the extent that principles of user ownership do not allow transfer of equity ownership, expose owners to further obligations for the debts of the firm, tie instrumental user investments to other fixed sources of income, and actively give user-owners the opportunity to participate in strategic management decisions, the manager and the owners in a user owned firm are more interdependent and interactive. The roles of the user and manager are distinguished by the **interpersonal roles.** Interpersonal roles include a **liason** of user concerns, a **figurehead** representing user values and a **leader** and **negotiator** reconciling user preferences with the capabilities of the work organization.

1D) User owners have more points of interdependency with other owners and with the work organization than do investor owners. Investor owners must ultimately be satisfied with the return on equity investment or they may exit the association. User owners must agree on a series of multiple objectives of product quantities and qualities. In investor owned firms, these product character decisions can be made virtually independently of owners except for their effect on investment. In user owned firms, the owners are the customers and decisions regarding products or services are directly influenced by owner preferences to the extent that the owners are the customers. Multiple objectives raise the cost of decision making because of increased complexity, the introduction of problems of ranking and increased ambiguity. Multiple objectives would increase the importance of the manager's leadership role in order to to give order to the ranking of objectives. The use of socialization and preselection of points of agreement among members become important items that the manager must maintain.

2A) Common values lower the transaction cost of decisions within the owner association and the work organization. The principle of nonprofit operation and limited return to capital directs the benefits of the organization to the users. Since return to capital is limited, the user-owner must maximize value in terms of patronage. The nonprofit and limited return to capital principle reinforces a production focus among managers as opposed to an outward marketing or finance market focus of the manager of an investor owned firm.

2B) The profit operation and unlimited return to capital principle allows the manager to make decisions for investor-owners that are less interdependent with the decisions made for customers. With unlimited return to capital and less dependence upon owners, the manager is able to take on more the entrepreneurial roles of finding new ways to attract capital and expanding or entering new industries in search of greater profits at reasonable risk levels. With a more simply defined profit criterion for evaluation and potential rewards from unlimited return to capital, the manager of an investor owned firm is likely to focus more on financial markets or product markets. This contrasts with the focus of the manager of a user owned firm on production.

2C) The distinction between the owner association and work organization can be more important in a cooperative than in an investor firm if owners and managers are more interdependent and interactive. The nature of user ownership principles should make owners more interdependent and more interactive than investor ownership principles. The cooperative could be described as an association of users, a multiplant firm, or some combination depending on such contingencies as the nature of tasks. That is why the relationship of both owner association and work organization must be considered for analysis (Fauquet, 1935) and why user ownership principles may result in lower decision costs through goal congruity (Ouichi, 1980).

3A) The nature of the tasks facing the manager can affect the degree of interdependency and interaction between owners and the manager. If there is a high degree of **conflict** within the work organization, the manager may be forced into the role of a disturbance handler or conflict negotiator. This might happen in a tightly structured machine bureaucracy operating in a rapidly changing or complex environment. Under these conditions the manager and the work organization cannot function as interdependently and interactively with the user-owners and the distinctions in role behavior between managers of user and investor owned firms may be overridden. The organization in this case may be only able to meet one or two of the multiple objectives of user-owners and the difference between manager behavior in user and investor owned firms may be weaker.

The machine bureaucracy can offer a high degree of exterior control by centralization of control in the work manager and the imposition of standard operating rules and requirements. Some of the features of the machine bureaucracy that do not allow it to operate well in a complex and unstable environment are: (1) the potential isolation of the top management by (2) an inflexible informal communication system; and (3) the sophistication and regulation of work technology.

3B) Dealing with **uncertainty** in a complex environment can also affect the degree of interdependency among and interaction between owners and the manager. In a complex environment the owners must rely on the skills of the professional or craftsman to mediate the uncertainty of the environment. The professional is trained to deal with a class of problems that are changing relatively slowly over time and yield a limited series of diagnoses. Here the manager might be more predisposed to use the skills of the profession rather than meeting the objectives of the ownership association. The owners may have difficulty in evaluating the performance of the manager because of the screen of technical jargon that may separate the owner from the professional manager.

Owners may also have more difficulty exercising control over the manager trained in a profession. The ability to cope with uncertainty in the environment is a source of influence for the professional. Imposing strict control over this type of manager activity may limit the effectiveness of professional skils. To the extent that professionals are more dependent upon their professions than the organization for recognition and reward, they may act independently of the organizational roles prescribed for them by ownership principles. "Leapfrogs" may escape control by jumping from organization to organization on the basis of how it advances their career. "Crusaders" may exercise their own overriding value system in their analysis which may or may not coincide with the values of the owner association. "Bureaucrats" may know and understand the preferences and objectives of owners, but only selectively meet them in order to achieve security and recognition within the organization. Because training and socialization is important formation for the professional values, owners may have greater control if they have influence over the training of professionals.

3C) **Product diversity** and **centralization** may also affect the interdependence and interaction of the owner and the manager. The greater the number of user owners and diversity of products, the less likely that user owners will be able to maintain as many points of agreement. In addition, the diversity and number of employees necessary to deal with a large and diverse market circumscribes the ability of the owner to evaluate the firm's products, cross subsidies, overall risk behavior and management of the work organization. Only if divisional managers have autonomy and interaction with their regional clients can the influence of user ownership principles be expressed in a large work organization with diverse products.

3D) Technology, complexity, diversity and rate of change may affect the behavioral roles of managers in any organization, or in an organizational part, depending on the use of coordinating mechanisms such as standardization of work, use of professional skills and standardization of outputs. Whether these conditions override the managerial roles prescribed by ownership principles depends in part on the ability of top managers (for example, in the machine bureaucracy to overcome conflict in the organization). Key control mechanisms for a manager facing conflict are a flexible communication system, informative evaluation practices, and well developed informal information systems. These allow some of the conflict to be mediated through mutual adjustment where the problem occurs instead of always being elevated to the top manager.

Owners exert control over the manager through the five coordinating mechanisms including: mutual adjustment through interaction, direct supervision by the board of directors, directives for the decision process itself through policy, specification of outputs by reporting requirements, and specification of skills by job description. The formal aspects of these coordinating mechanisms are introduced through the organization charter and bylaws.

3E) **Socialization** of the manager to owner values is an important control mechanism for owners in controlling the professional manager, restrict the manager's ability to make decisions. Having and cultivating common values provides some assurance of consistency in the outcome of analysis and decision making. Socialization and regionalization allows control by regional user-owners of the managers or organization divisions work organization manager through mutual adjustment.

4A) Organizations are complex. They exist in many forms and shapes. When empirically measuring the impact of ownership principles, we should take into account the impact of the environment and the nature of work tasks. Unless the impact of technology, complexity, rate of change, and diversity are held constant, the empirical comparisons of the impact of alternative ownership institutions may incorrectly attribute differences between investor and uer owned firms to ownership principles.

4B) The validity of the hypothesis that ownership principles do make a difference in firm behavior is suggested by the financial strategy of small user and investor owned firms (Chapter 4). Investor owned firms are hypothesized to access financial markets for equity and delete capital whereas user owned firms are more likely to capitalize on their closer interdependence with user-owners. Studies by Babb and Keen (1980, 1982) on cooperative and proprietary cheese plants in Wisconsin suggest that the user firm focused more on serving user production needs and providing higher average returns to user owners while proprietary firms were more efficient in maximizing the use of their capital.

Because dairy and dairy products are so highly regulated it is likely that these cheese plants were operating in a simple, stable environment. Without having to adjust to change or uncertainty, these processing plants exhibit the behavior suggested by economic analysis such as discussed by Roy (1976, Chapter 12). With an impending change in dairy regulation, the sufficiency of this analysis might prove inadequate as the two firms under two sets of different ownership principles seek to contain uncertainty due to change. Perhaps they would react along the same lines as the financial strategy of the small firm manager, the investor firm using the financial market and the user firm capitalizing on the firm-user interdependency.

Other measures of the interaction between owners and the firm would come from the degree of democratization in the owner association. If user owners were more interactive, then structural differences should be evident. Caffereta (1982) suggests a battery of measures of democratization within an association. Other behaviors one would expect include more user participation in voting, more committees, greater information availability and quality, and other member administration activities. These behaviors would suggest a higher degree of interaction of user-owners with the member association and a higher degree of interdependency with the work organization that would lead to different manager behavior under user ownership principles.

The importance of socialization in user owned firms is suggested by the philosophical differences cooperatives have with general farm organizations that prevent mergers (USDA, March 1979, 24).

8.2 Suggestions for Further Research

This essay, long as it is, only scratched the surface of the differences managerial behavior between investor and user owned firms. Only two parts of a model of situational determinants of managerial roles were employed. Other parts of the model which could also be used are the informal organization, the evaluation and feedback system, and individual traits, needs, skills and values. These are also important determinants of managerial roles.

There is also a great need for empirical research of organizational performance to test the hypotheses presented here. The emphasis on role behavior and structure provide many opportunities for measuring behavior differences. Further quantification of behavioral differences could be drawn from Ouichi's (1980) extension of decisional transaction cost theory.

Finally, the theory of the cooperative firm needs to be further developed and expanded to direct researchers, public policy makers and managers in understanding their work.

The organizational structure typology presented here certainly could be tested and refined. In addition, some of the variety in institutions such as voting rules, patronage, open vs. closed membership, and patronage refunds could be examined for their effect on the owner-manager relationship.

The relationship of the board of directors to the manager is of crucial importance because it is such a direct and powerful means of control. The relationship of the manager to the board opens up questions along the lines of negotiation and game theory. How are objectives translated into operationalizable rules? Once the rules of the game are established, how do the players achieve their goals within the rules?

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