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A STUDY OF PLANNED ORGANIZATIONAL
CHANGE AT GENERAL DYNAMICS

by
Richard A. Barker

A dissertation submitted in partial fulfillment
of the requirements for the degree of

Doctor of Education

University of San Diego

1990

Dissertation Committee

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ABSTRACT

A case study approach was used to evaluate organizational change that occurred between 1986 and 1989 at General Dynamics Corporation. The purpose of the study was to determine how persons in leading positions can realistically expect to plan and implement significant, planned organizational changes. The changes specifically studied were those which resulted from the planning and implementation of the Ethics Program. The Ethics Program at General Dynamics was examined not only as a case example of a planned, intended change, but as a vehicle for broad strategic goals pertaining to human resources management.

Historic data from corporate documents and surveys, and current data from a resurvey were used to establish changes in trends in the organization. Interviews were used to explore the planning process and general planning-related change trends. Two groups of employees, totaling twenty individuals, were interviewed. The planning group (five individuals) provided specific information on planning processes, and the cultural group (fifteen individuals) provided general information on the culture of the organization and culturally related changes.

Results indicated that the Ethics Program was successful in meeting its specific objectives of making employees aware of the standards of conduct and enforcing conformance to those standards. The broader human resources

goals intended by the program's designers did not appear to have been as successfully implemented. A conflict between two distinctively different sets of cultural values appeared to have offset many of the intended changes. Findings further indicated that the Ethics Program was most likely an inappropriate vehicle for the implementation of general, strategic human resources goals.

To Barbara, my other half

ACKNOWLEDGEMENTS

No research project, and certainly no dissertation, is entirely the result of one person's efforts. I have been fortunate to have conducted this research at a time when numerous helpful resources were available. I would like to thank those individuals at General Dynamics who allowed me to conduct this study even though they had to suppress considerable anxiety about my potential findings. I would like to acknowledge the support of Ray Raynante, the Ethics Director at Electronics Division, who helped me gain perspective on the Ethics Program. And, I would like to thank the anonymous interviewees who were frank, honest, and very cooperative even though many of them had anxieties to overcome as well.

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I would like to acknowledge the faculty and staff of the University of San Diego in general, and the School of Education specifically, for upholding the highest traditions of the liberal arts. My participation in the theoretical explorations of leadership, organizational theory, ethics, and educational philosophy and psychology has been one of the most enlightening and rewarding experiences of my life.

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CHAPTER I

INTRODUCTION

As organizational competition rises to a global level, long range planning has become increasingly important. Organizations in the near future will be required to go through major strategic reorientations that will involve technological and sociostructural changes. These changes will require technological improvements in products and manufacturing methods, structural changes in organization, and reevaluations of services, markets, competition, and human resources.

In the future, foreign competition will increase, natural resources will become more scarce and expensive, and productivity levels in the United States will remain the same, or even decline (Byars, 1984). Strategic planning will be needed in all types and sizes of organizations. "Strategic management is concerned with making decisions about an organization's future direction and implementing those decisions" (Byars, 1984, p. 6).

Social, political, and economic changes in the environment have forced organization heads to consider strategic organizational changes, but managers too often

focus on small components of the overall change problem, and, further, tend to underestimate the scope of the task. Tichy (1983) identified some of the common areas of management focus which he called tactical concerns:

1. Should we change from a functional structure to a matrix structure?

2. Should we centralize or decentralize?

3. Should we launch an expensive companywide "quality of work" program?

4. Should we individualize or collectivize the incentive program?

5. Should we attempt to do a better job of relating business strategy to organizational design? (p. 4)

These are called "tactical" concerns because they do not fit into an overall framework for planned change. Tactical changes are frequently guided by fad or personal preference, and are generally not based on a systematic analysis of organizational needs. Managers may be able to adapt a trial and error method of changing to meet the needs of smaller and simpler organizations. Trial and error methods are often invited by the massive and unpredictable changes in social environment, political posturing, and economic conditions. But large organizations with their ever-increasing complexity cannot tolerate sporadic, discontinuous change and expect to remain in business. Few executives believe that the deep and enduring aspects of an organization can be easily changed or replaced (Wilkins &

Bristow, 1987). These authors noted "However, the time frames executives consider when attempting to implement bold new strategies . . . suggest that many are either not clear about the difficulties involved or choose to ignore certain, key principles of change" (p. 221).

Organizations of all types facing an increasingly turbulent and complex environment must develop strategic planning capabilities to survive. Tichy (1983) suggested that strategic changes involve three sets of problems: (a) technical problems, such as selection of markets, product development, pricing, and organizational design; (b) political problems, such as regulatory requirements and shifting power bases; and (c) cultural problems, such as shifting personal values and inefficient but traditional rituals. These three sets of problems have been addressed at General Dynamics Corporation and the proposed solutions have been incorporated into the company's strategic objectives. Actions taken on the strategic plan have resulted in the implementation of a corporatewide Ethics Program.

Historical Background

General Dynamics Corporation began a program of strategic organizational change in mid-1985 as the result of serious charges of fraud, deception, and graft by the United States Government (Larsen, 1987). During the previous year, many examples of mischarging to government contracts by

defense industry companies were brought to media attention by various members of Congress. General Dynamics was specifically targeted for investigation by then Secretary of the Navy, John Lehman. After government auditors found many unallowable charges to government contracts by members of the corporation, Secretary Lehman threatened to withhold the award of new contracts to the company by the Navy and to withhold progress payments on existing contracts. General Dynamics executives negotiated an agreement with the Navy that committed the company to develop and implement effective changes in organizational policy and behavior.

In mid-1985, General Dynamics CEO, David Lewis, who had been one of the key players in the controversy, announced his retirement effective January, 1986, and appointed Stanley Pace, formerly of TRW, as Vice Chairman to replace him upon his retirement. Pace was commissioned to establish a corporatewide Ethics Program and to make any other changes required to improve the company's image and reputation (Larsen, 1987). In addition, Pace was charged with the responsibility of maintaining the company's profitability in the face of massive cuts in defense spending and sweeping changes in the Defense Department's procurement process ("General Dynamics," 1988). Because the Department of Defense was and is the primary customer of General Dynamics, any changes in defense procurement can seriously affect the company's business posture. By May, 1989, the company had become financially sound and was devoid of implication in

the myriad of investigations, charges, and fines before the Justice Department in 1988 and early 1989 known to the public as the Ill Wind scandal. The corporatewide Ethics Program, created and implemented as a planned change, and its effect on operating procedures, employee attitudes, corporate image, and human resources programs, is the focus of this research study.

Statement of the Problem

General Dynamics undertook a rare form of strategic planning by including an element of social responsibility as a formal strategic objective, and the Ethics Program was implemented to meet this objective. The company's business posture in 1988 indicated that the specific objectives of the program to improve the company's image and to continue winning government contracts were met (Packard, Laird, Moot, Bowsher & Conahan, 1988).

The unique nature of the Ethics Program warranted further investigation. Even though the strategic objectives were apparently accomplished, the broader issue of the successful implementation of a planned organizational change was not as apparent. The Ethics Program has become a model for the industry (Packard et al., 1988), but what actually happened inside the organization? The position of the researcher as a participant observer in the organization and an internal change agent provided the means to examine the implied goals of the program further. The implied goals of

the Ethics Program were related to expected organizational changes that would affect the culture of the organization. The specific strategic objectives could be evaluated by economic and organizational performance measures, but the broader goals of the program would have to be examined as changes in the fundamental organizational behavior.

Purpose of the Study

The purpose of this research was to determine how persons in leading positions can realistically expect to plan and implement a significant, planned organizational change such as that envisioned by the Ethics Program of General Dynamics Corporation. To accomplish this purpose, I investigated three research questions:

1. What changes actually took place at General Dynamics between the years 1985 and 1988?
2. Were the changes the result of the strategic plan?
3. Was the Ethics Program successful in meeting its specific objectives and its broader goals?

Other than hypothesizing that specific changes have taken place over the target period, this research is primarily an exploratory case study. The business aspects of the corporate mission were not considered except as they were relevant to specific programs created as a part of the overall Ethics Program. Even though the specific changes under examination were probably placed on the agenda as the result of economic pressures, the focus of this study is not

on the specific motivation for change but the planning and implementation of the change itself and the results of the program.

Definition of Terms

The following terms used in this study may have different common meanings than are intended.

Change agent: Any person involved in creating planned change in an organization. The person may or may not be a member of that organization (Bennis, 1966).

Change program: A coordinated series of interventions that are interrelated and build upon each other to produce certain specific planned changes (Bennis, 1969).

Feedback: Information sent from one system or subsystem to another concerning the performance of the receiver which is intended to affect some change in the actions of the receiver (Anderson, 1970).

Intervention: A specific action taken by a change agent to facilitate the change process, usually an action that interferes with a common sequence of behaviors (Fordyce & Weil, 1971).

Latent functions: Consequences or aspects of an organization or social group which are unintended, and may or may not be recognized (Merton, 1957).

Manifest functions: Consequences or aspects of an organization or social group which are intended, expected, and recognized (Merton, 1957).

Norm: An idea in the minds of the members of a group that can be put into the form of a statement, and that specifies what the members should do, ought to do, and are expected to do under given circumstances (Homans, 1950).

Organizational climate: General motivational patterns among organization members which are supported by formal and informal reward systems (Litwin & Stringer, 1968).

Organizational culture: The collection of beliefs, values, traditions, customs, rituals, and practices that are prevalent and enduring within a definable group, and are passed from generation to generation of group members (Levinson, 1972).

Organizational effectiveness: A measure of the adequacy of organizational processes and the degree to which specified goals are attained economically (Bennis, 1969).

Planned change: A collaboration of some combination of external and internal change agents who bring about specified changes in the organization based on organizational goals and objectives (Bennis, Benne, Chin, & Corey, 1976).

Strategic plan: A decision or series of decisions made in the present incorporating the organizational mission, goals, and objectives into a behavioral strategy to position the organization for long term maximization of opportunity (Byars, 1984).

Survey feedback: A specific type of organizational intervention where a survey is conducted, analyzed, and

summarized and then fed back to the original respondents for focused group discussions (Mann, 1957).

Assumptions

The purpose of the study was accomplished through an evaluation of the effectiveness of the Ethics Program at General Dynamics. The evaluation included an examination of the planning process that resulted in the implementation of the Ethics Program, an evaluation of the program itself, an evaluation of related program successes and failures, and an assessment of the impact of the program on the culture of the organization.

Some basic assumptions were made regarding the nature of the organization, the nature of change, and the ability of the researcher to identify and analyze the sources of organizational change. The organization was assumed to be represented by divisions located in San Diego, and the Electronics Division in particular. Changes were assumed to have been detectable and to have had an identifiable source. Objectives and programmatic means for selecting those objectives were assumed to have been difficult to specify. The participant observer was assumed to have sufficient resources to evaluate programs with respect to the nature and quality of the actions of program agents and outcomes. The study was assumed to be able to explain a particular organizational phenomenon within its organizational context.

Limitations

An explanation of the process of planning and change at General Dynamics provides a more holistic and meaningful theoretical proposition than a carefully controlled experiment which excludes many of the most important, contextual relationships. However, even though I have been a participant observer in the case, I have had little control over the significant events. Causative analysis cannot be as rigorous in a case study as that found in experimental designs. Still, the research questions were stated in such a way that causative analysis was not as important as descriptive analysis. Thus, the results of the study should be considered a descriptive analysis rather than a test of hypotheses.

In addition, the results cannot necessarily be interpreted as an accurate characterization of the real General Dynamics Corporation. Whatever the entire organization is, it is remarkably diverse and constantly changing. No study could accurately portray the complex character of any company of 100,000 employees with several major divisions producing different sorts of products in different parts of the world. The results of this study at best characterize one part of the company at one point in time.

General Dynamics is primarily a government contractor. As such, the company is culturally oriented to the protection of information, both as a measure of national

security and as a measure of political self-protection. The company has allowed the publication of previous research conducted in the corporation only if the company was not identified. That the present study could be conducted and published openly is in itself an indication of actual cultural change within the company. Still, there was a good deal of pertinent information that could not be revealed because it was proprietary or classified. Although the results of this study were limited by restrictions on certain types of information, the conclusions have not been affected by these restrictions. The conclusions may be considered both substantial and meaningful in regard to the study's purpose.

Significance of the Study

Despite its limitations, the unique character of the case and the opportunities for insightful observation by the researcher give this study its merit. The opportunities for methodical, longitudinal analysis of cultural phenomena within an organization are very rare. As noted in the next chapter, most organizational studies are conducted over relatively short periods of time by outside agents. Few long term members of organizations have the skills or motivation necessary to conduct such a study.

But the key contribution of this research to organizational literature is the orientation of the investigation toward whole processes rather than isolated

elements of processes. The ultimate goal of this research is to contribute to the understanding of leadership as a process of collective, purposeful change. Burns (1978) specified planned change as a critical test for leaders: "The test of their leadership function is their contribution to change, measured by purpose drawn from collective motives and values" (p. 427). Even without characterizing Stanley Pace as a leader, the kind of change strategy he undertook at General Dynamics is the kind to which Burns was referring. It is not my intention to demonstrate whether or not Pace was a leader during the time under study. My intention is to examine the nature of the change itself to determine whether or not people can reasonably expect to plan and implement change of this magnitude while having some level of control on the manifest outcomes. Verifying change that has occurred as the result of the planning process may help to indicate whether or not intended change is an integral part of the leadership process.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

As stated in Chapter I, the focus of this study is on the process of change and its relationship to leadership. Because the study is oriented toward an understanding of the whole process of change rather than isolated elements of it, a somewhat different theoretical approach was needed to facilitate the analysis and interpretation of the results. The process of change is far too complex to be understood by the usual reductionistic techniques. Rather than using a linear rational model to structure the investigation, an integrated network of models and concepts had to be accumulated. This approach is called bootstrapping (Capra, 1982).

The bootstrap approach requires a broad framework of interlocking models and concepts. None of the models or concepts are any more important than the others to the framework; each model is valid for some aspect of a phenomenon or range of phenomena. Models are considered

approximations of reality rather than all-encompassing theories. Linear methods of investigation using a priori models tend to produce linear results; the nature of the model dictates the nature of the result because reality must be structured to accommodate the model. The bootstrap approach provides a variety of tools to the researcher to apply to reality as it is encountered (Capra, 1982).

The study of organizational change in real world situations cannot be facilitated by the simple application of organizational change theory to defined organizational situations. Understanding change and its implications must be an eclectic use of ideas that, in many cases, overlap each other but that highlight different aspects of the change process. The current study is concerned with how the plan for change was developed, the impact of the planning process on the organization, organizational change that resulted from the implementation of the plan, and the meaning of the change to the organization and society at large.

Merton (1957) has suggested that there are two types of functions of any change or feature of a society: manifest and latent functions. Manifest functions are those consequences for society or any of its segments that are intended, expected, and recognized by participants in the social system. Latent functions are those consequences that are neither intended nor recognized. Although Merton specified that latent functions are usually not recognizable

by group members, he also suggested that they become apparent in time.

In viewing the organization as a social system, the concept of manifest and latent functions may be used to explain various outcomes of the organization's strategic plan. Manifest functions are those functions of the plan and its subsequent activities that are related to the expected outcomes of the plan. Latent functions are those functions that are related to the unexpected outcomes of the plan. To restate, latent functions are those developments that directly result from the implementation of the plan and were not intended by the planners. A successfully implemented plan will maximize the manifest functions of the plan while minimizing the latent or unforeseen functions of the plan. Both types of functions of the strategic plan in relation to its consequences for organizational change and organizational culture at General Dynamics have been investigated in this study.

To investigate manifest and latent functions of a program such as the Ethics Program, some background in the planning process, organizational change, and organizational culture would be useful. An understanding of the planning process provides a means to assess the objectives of the program and, ultimately, evaluate organizational performance to those objectives. The organizational change process must be understood to define the development of the planning process and the impact of the implementation of the plan. A

definition of the organizational culture will provide a basis upon which to explain the effects of the program on the organization and its members.

Society at large is concerned with the legitimacy of the organization and its operations. Whether or not an organization can continue to exist depends a great deal on the manifest and latent outcomes of its operations and the impact of those outcomes on the community in which the organization operates. Therefore, the aspects of the community's and the organization's understanding of the organization's role and responsibility must be examined. In this case, the planned change under consideration is specifically related to the organization's responsibility to its customers and to the community.

Finally, the role of planned change and its context in society is crucial to the process of leadership. Our understanding of the leadership process has undergone significant evolution in the recent past and should be examined. The ultimate objective of the current study is to contribute to the understanding of at least one element of the leadership process: intended, collective change.

In light of the previous discussion, Chapter II has been organized to cover a variety of interrelated concepts and models for planning processes, organizational change processes, organizational culture, organizational legitimacy, and leadership. In some cases, an examination of the development of thought in an area is appropriate to

facilitate an understanding of current thinking. The purpose of the chapter is to provide a broad framework for the discussion and interpretation of the results of the study.

Strategic Planning

Strategic planning is primarily a management function that is designed to have specific business applications. Most published literature distinguishes between strategy content and the strategy process. But there have been very few attempts to explore the relationship between strategy content and process within an organization (Miller, 1989). Strategy content typically consists of marketing strategies, product line strategies, technological strategies, financial strategies, and growth strategies. Some strategic planning literature is devoted to human resource planning (Angle, Manz & Van De Ven, 1985; Dyer, 1985; Galbraith, 1983; Hall, 1984; Kanter, 1983a; Lorange & Murphy, 1983, 1984; Miles & Snow, 1984; Schuler, 1989; Schuler & Jackson, 1987; Stumpf & Hanrahan, 1984), but none specifically addresses social or community responsibility as an element of strategic planning content. The unique feature of the Ethics Program as an element of the strategic plan at General Dynamics is that its only potentially measurable objective was to maintain the company's legitimacy. To apply strategic planning principles to the planning, development, and implementation processes of this program and their impact on the

organization, the literature can be grouped to examine three elements of strategic planning: the planning process itself, the business aspects of the planning process which are primarily related to content, and the cultural aspects of the planning process.

The Planning Process

Strategic planning is designed to answer four issues for an organization (Byars, 1984). The four issues concern organizational identity, current business posture, future organizational directions, and desirable strategies for progressing in future directions. Strategic planning helps an organization make decisions in the present to develop a future position. Strategic planning is desirable because organizations that develop plans normally perform better than ones that do not. Planning insures that decisions will be more consistent with the organizational mission, and planning allows smoother and more efficient change by indicating milestones and timing.

Normally, the strategic planning process is characterized as a step by step process (Bennis, 1966; Braybrooke & Lindblom, 1963; Byars, 1984; Lorange & Vancil, 1976; Normann, 1977; Ohmae, 1982; Wrapp, 1967). Ohmae (1982) specified five steps in the planning process. First, the business domain must be clearly defined. Second, the business environment must be extrapolated into the future. Third, the choices of strategic options must be listed and then narrowed according to predictions of the future

environment. Fourth, a plan of implementation must be developed to coincide with best estimates of available resources, and the plan must be implemented to pace itself with the distribution of those resources. And fifth, a stringent change control procedure must be implemented to prevent changing basic assumptions and ground rules unless it becomes absolutely necessary.

Ohmae's suggestion provides a reasonable outline of the planning process. However, a specification of more detailed activities would be more useful to the functionally oriented manager. With this thought in mind, Byars (1984) outlined eight steps for the planning, implementation, and evaluation of strategic goals. The first five steps are considered planning activities, steps six and seven are considered implementation activities, and step eight can be considered a performance evaluation.

The first step is to define the organizational mission with special attention to the organization's philosophy of doing business and purpose for existence. The organizational philosophy establishes the values, beliefs, and guidelines for the manner in which the organization provides goods and services and conducts itself in relation to the community. The organizational purpose defines the activities that the organization conceptualizes as characteristic of its role in business and in the community. The mission statement, then, is a brief and succinct

statement that communicates the organization's view of itself to the world.

The second step is to formulate policies as general guidelines for action. These policies specifically outline the framework within which organizational objectives are established and strategies are selected. Once action decisions are made, strategic policies provide guidelines for implementation.

The third step is to establish long range and short range objectives. Long range objectives specify results desired from the pursuit of the organizational mission to be expected one or more years from the present. Short range objectives set performance targets to be used to achieve the organization's long range objectives.

The fourth step is to identify strategic alternatives and options available to the organization for achieving its long and short range objectives. In the fourth step, omissions of viable alternatives can result in an incorrect decision. Therefore error should be weighted on the side of inclusion rather than of omission.

The fifth step is to compare alternatives and select a strategy. The strategy chosen should be consistent with previously decided and specified organizational mission and strategic policies.

The sixth step is to develop an organizational structure with the appropriate authority relationships and organizational units to implement the strategy. The

organizational structure is critical. An inappropriate structure can nullify a carefully conceived strategic plan.

The seventh step is to manage organizational activities and allocate resources to accomplish objectives. The key objective in the sixth step is to ensure that the activities necessary to accomplish the mission and strategy are performed effectively.

Finally, the eighth step is to monitor the effectiveness of the strategy in achieving the organizational mission and objectives. The eighth step is designed as a feedback loop to provide top managers with sufficient visibility to determine whether or not the strategic objectives have been reached.

The formalized planning process outlined by Byars has the distinct advantage of face validity. Byars intended for the eight steps to provide a comprehensive framework for the examination and analysis of the planning process in any organization. To the uninitiated, the process seems to be very clear, precise, and rational. In the world of business however, a rationally ordered process with distinct, formalized steps may not be as easy to apply as it would appear. After studying corporate executives in strategic situations, Quinn (1980) concluded that successful managers do not use formal methods but rather conscious, proactive, and incremental forward movements to facilitate the planning process. Incremental movements are specifically designed to improve the quality of information, sequencing, and

organizational awareness, and to decrease resistance and uncertainty. In addition, the executives acted incrementally to improve the strategic decision process by involving those who have the necessary knowledge, skill, and decision capability, and to avoid hasty and premature actions. Quinn asserted that good strategic management avoids becoming committed to details and assumptions too soon, and therefore no single paradigm can hold for all strategic situations.

Quinn did indicate that his sample of large organizations making complex decisions revealed broad, general steps used in the strategic planning process. The overall character of the planning process included numerous loops back to earlier stages to accommodate unexpected or overlooked issues. The first general, broad step was to create awareness of the organization's new direction, and marshall commitment through active development of informal need-sensing systems. At this point, executives facilitated the gradual changing of symbols through highly visible actions and wordless messages, encouraged partial solutions, stimulated increased flexibility, and systematically waited. By this method of action, executives gradually legitimized the new perspectives and tactical shifts, built political support, and overcame opposition.

The second broad step was to solidify progress incrementally by creating pockets of strong commitment and focusing the organization in the new direction. Pockets of

formalized commitment were created through champions and managing coalitions. Focusing on new organizational directions required facilitating the continuous process of change by discouraging stagnation and integrating the change process with individual and group interests.

Quinn clearly acknowledged the role of political and cultural factors in the planning process. Thinking about strategic planning as a separate, sequential process and relying on the rationality of formally derived strategies, according to Quinn, tends to encourage managers to use the inherent power of their positions to force organizations to respond and create unsuccessful strategic implementations. Successful implementations are slow, deliberate, incremental processes that adapt to the changing environment and organizational conditions. By the time the strategic plan begins to crystallize, portions of the plan have already been implemented. Quinn observed that the key to successful strategic change is to build sufficient organizational momentum and identity with the strategy.

The departure from the rational step-by-step approach proposed by Quinn has been expanded by Tichy (1983) who has suggested that the strategic planning process has been overly simplified by executives and theorists who focus too narrowly on internal organizational structures. Organizational problems, crises, and opportunities arise from pressures exerted on the organization by the environment, diversification, advances in technology, and

changes in people. Organizational problems, crises, and opportunities create uncertainties that must be managed and controlled: technical uncertainty, political uncertainty, and cultural uncertainty. Technical uncertainty can be about markets, production capability, and technical innovation. Political uncertainty can be about who are the candidates for success, power distributions, and resource and reward distributions. Cultural uncertainty is usually about changing and conflicting values systems.

Each of the three uncertainties (technical, political, and cultural) and their resulting problems can be specified for the various phases of the strategic planning process. During the phases of the planning process, the strategic activities and influences can be assessed by three organizational systems. The technical system assesses environmental threats, business opportunities, organizational strengths and weaknesses, and defines the mission and the resources needed to accomplish it. The political system assesses who influences the development of the mission and strategy, and what coalitions are building around what strategic alternatives. The cultural system assesses the influence of values and philosophy on the mission, and helps to develop a culture that is aligned with the mission and strategic direction.

The three organizational systems require three sets of strategic organizational tasks. Technical strategic tasks are environmental scanning and strategic planning.

Political strategic tasks are lobbying and influencing external contingencies, internal governance structuring, and coalition activities to influence decisions. Cultural strategic tasks involve the use of symbolic events to reinforce cultural role modeling by key people as well as clarifying and defining values.

Each of the strategic tasks is characterized by various process problems. Tichy suggested that technical process problems include role and performance ambiguity, faltering communication, and resulting resistance to change. These problems may be addressed by fitting people into roles and specifying performance criteria for those roles, and developing information systems and planning systems to support strategy implementation. Political process problems include ambitious, self-serving power politics, and may be managed by controlling succession, or getting ahead, politics and reward systems. Cultural process problems generally include symbolic incongruence and cultural dissonance, and may be managed by controlling symbolic language, reward systems, and formal communication networks.

Solutions to each of the process problems brings about characteristic organizational changes. Technical changes can be expected in technology, organizational structure, strategy, and management. Political changes can be expected in promotions/successions, reward issues, shifts in power centers, external control issues, and internal control issues. Cultural changes can be expected in performance

related values, decision making values, human resources values, and management style.

Tichy recommended that development of human resources should be oriented with the three aspects of the strategic process. Technical aspects require selecting and developing employees with technical skills. Effective management requires a match of management styles with technical tasks. Political aspects of the strategic process require the appropriate use of political skills. Effective management requires matching political needs with organizational opportunities. Cultural aspects require using cultural leadership skills. Effective management requires matching values of individuals with organizational culture.

Business Aspects of Strategic Planning

The process of strategic planning is important in a study of organizational behavior because the nature of the process provides a framework within which the behavior may be defined. However, an understanding of the cultural aspects of organizational behavior requires an exploration of the motives and objectives that created the need for a planning process. Strategic planning is primarily a method used by organizations to maximize profits by gaining a competitive advantage (Porter, 1980, 1985, 1987). Therefore, the business aspects of strategic planning receive the most attention in the literature and from executive managers. The current study focuses on a content element of strategic planning that is not traditionally

considered a fundamental element, ethical behavior.

Generally, business planning focuses on the broad content areas of growth strategies, harvesting or endgame strategies, and retrenchment strategies. Early thinking in strategic planning specified decision processes and identified areas of focus for managers to increase their decision effectiveness. Lorange and Vancil (1976) concluded that "an effective planning system requires 'situational design;' it must take into account the particular company's situation, especially along the dimensions of size and diversity" (p. 75). Lorange and Vancil suggested that strategic planning systems have two major functions: to develop an integrated, coordinated, and consistent long-term plan of action, and to facilitate the adaptation of the company to environmental change. They specified six decision issues to be addressed when designing a strategic planning system in an organization.

The first issue concerns communicating the corporate performance goals. Middle managers in large companies should be able to assess the potential of their own division's business. Therefore, corporate executives should not attempt to bias division managers in their assessments. Division recommendations should then be the basis for corporate goal setting.

The second issue concerns the goal setting process. The fundamental question for this issue is who sets the goals, division managers or corporate executives? In large

companies, initial goal setting should be effected at the division level because of its closer and more intimate knowledge of the industry.

The third issue concerns environmental scanning. The division management should provide a specific assessment of business conditions. Monitoring detailed environmental changes is too difficult to be performed by top executives.

The fourth issue concerns the focus of subordinate managers. Each division in a large company must adopt a strategic outlook and focus on achieving that outlook. Division managers should focus on identifying and analyzing strategic alternatives and their financial implications. However, the planning activity cannot become simply a numbers game.

The fifth issue concerns the corporate planner's role. In a large company, the corporate planner's organizational status can have a significant symbolic value in stressing the importance of formal strategic planning and its relationship with conventional budgeting. The planner should be a catalyst, encouraging division managers to adopt a strategic orientation, and should not become involved in formulating the plans. The primary function of the corporate planner is system maintenance and coordination.

The sixth issue concerns the linkage of planning and budgeting. The planning system should provide the means to narrow a broad range of strategic alternatives down to a specific strategy and budget plan. The budget plan should

be designed to accommodate strategic objectives and reasonable deviations. The narrowing can be slow or rapid depending on situation specifics and business conditions. In a large company, the linkage between the planning system and budgeting is usually loose and the narrowing of alternatives can be more gradual because resources do not normally need to be committed early in the planning process.

Lorange and Vancil suggested that planning systems in a large company evolve from less explicit to more explicit goals and objectives. As the planning systems evolve, objectives become subject to negotiation, the focus of middle management becomes more strategic, and the linkage between budget and planning becomes tighter. The design of the planning process is a continuous task that requires vigilance and insight.

Later strategic thinking began to incorporate influences from outside the organization into the planning process. Content of the strategy came to be thought of less as an end result of the plan and more as a guideline for strategic processes. Porter (1980) developed one of the most widely used systems for conceptualizing planning strategies. Porter divided existing strategies into three categories: differentiation, cost leadership, and focus.

The strategy of differentiation is used when a company captures the market with a unique product or service. Porter argued that the strategy of differentiation is effective because it creates customer loyalty, restricts

price variances, and thereby reduces the opportunity for other competitors to enter the market. This strategy produces higher profit margins because less promotional outlay is required. Customers feel compelled to buy because there are no viable alternatives or substitute products.

The strategy of cost leadership is simple in concept, but one of the most difficult to implement. To remain competitive, companies must simply become the lowest cost producers in the industry. The key to this strategy is cost control so the company may reap higher returns than competitors, even at low prices.

Focus is a strategy used by companies producing highly specialized products or services for very narrow and limited markets. The markets may be limited by geographic area or specialized needs or interests of the customers. The focus strategy "rests on the promise that the firm is able to serve its narrow strategic target market more effectively or efficiently than competitors who are competing more broadly. As a result, the firm achieves either differentiation from better meeting the needs of the particular target, lower costs in serving this target, or both" (Porter, 1980, p. 38).

Miller (1989) expanded Porter's model to include three multifaceted process dimensions along which organizations might be measured: rationality, assertiveness, and interaction. The rationality or information processing dimension is central and includes intensive analysis, market

scanning, futuristic thinking, and thoughtful consideration to strategic issues. The interaction dimension is the level of political and social process inherent in strategic decisions, and includes bargaining, politicking, and consensus building. The assertiveness dimension concerns the level of risk taking and whether decisions are proactive or reactive.

Based on his expansion of Porter's model, Miller hypothesized that (a) the strategy of innovative differentiation, because of its complexity, will be positively related to all three dimensions of strategy making--information processing, interactive, and assertive; (b) cost leadership strategies, because of their emphasis on efficiency, will be inversely related to all three dimensions; (c) focus strategies, because of their simplified decision-making requirements, will be negatively related to information processing and interaction dimensions, but show no relationship to assertiveness because a wide range of risk taking behavior can be expected; (d) innovative differentiation will show a stronger relationship with information processing and interaction in successful firms than in unsuccessful firms; and (e) successful and unsuccessful firms will show no significant differences in the relationships between cost leadership and information processing and focus and information processing.

To test his hypotheses, Miller sampled 98 firms in the greater Montreal and Quebec City areas. Most of the firms were small (mean number of employees = 381), and many were owned by individuals, families, or small groups. Large diversified companies were avoided because they tended to have diversified strategies. Questionnaires were distributed to systematically assess strategic content and processes. Some interviews were conducted with CEOs and senior managers.

Using measures he developed, Miller found that innovative differentiation was positively related to the three dimensions, that these relationships were especially strong in successful firms, that these relationships were not significant in unsuccessful firms, that focus is inversely related to information processing, and that this relationship was stronger in successful companies. The above results supported some of Miller's hypotheses. The second hypothesis was not supported in that there were no significant relationships between cost leadership and any of the strategy dimensions. The fifth hypothesis was also not supported in that there was a significant difference between successful and unsuccessful companies on managerial interaction.

Miller concluded that strategic content and process can have many implications for each other, especially if the company is pursuing a strategy of innovative differentiation. Successful, innovative companies pursue

and use carefully extracted information, interact internally at high levels, and are fairly risk oriented. Cost leadership strategies, because they only make selected use of information and managerial interaction, do not have any meaningful implications for strategic processes. In fact, the cost control oriented companies who were high on interaction levels were less successful, probably because political bargaining and negotiations are expensive activities and tend to nullify cost efficiency. And finally, specializing in limited markets and product lines eliminates the need for high levels of information processing because the narrow focus simplifies administrative tasks and strategic decisions.

Miller suggested that managers be conscious of consistency between the business strategy and the process by which it is developed and implemented. Specifically, innovative companies must ensure that information gathering and interaction mechanisms are in place, are appropriate, and are working. And cost control efforts must be designed to eliminate parochial priorities and political squabbling which detract from cost efficiency objectives.

Miller's findings are strongly supportive of a broad section of strategic planning literature which addresses environmental scanning. MacMillan (1984) argued that to remain competitive, companies must adopt certain behaviors that capture control of their industries. Strategic policy is a dynamic problem that incorporates competitive

countermoves, and the only way to assess countermoves is to be acutely sensitive to the environment.

Wilson (1984) suggested that the purpose of strategic planning is to optimize the relationship between the organization and the environment, to maximize congruence and minimize friction. Environmental scanning encompasses the forecasting of future trends and the monitoring of current events. Wilson argued that environmental scanning is an essential part of strategic planning because it provides the framework for logical progression of the strategic process. Environmentally based planning must include not only a market strategy, but a technological strategy, human resources strategy, financial strategy, and a public policy and government relations strategy.

Wilson outlined the requirements of an environmental scanning system that might be used to feed information to the strategic process. The system must operate on the macro level, that is assess long range trends, and it must operate on a micro level to focus on and interpret specific events. The system must be holistic in the sense that it views trends in social, economic, political, and technological developments, and should be comprehensive in scope. The system cannot be linear or segmented, and it must be designed to continually revisit the environment instead of relying on one-shot or even periodic analysis. The system must stress contingency planning, and should be integrated into the strategic planning system.

Environmental scanning systems are important because they provide the organization with the ability to predict turning points. Without the ability to predict turning points, organizations are not able to cope with the volatile environment (Emerson, 1985). One mistake many organizations make is to forget that members of the organization live in and are affected by the environment. Strategic plans that do not address human resources, which are supplied by and affected by the environment, will generally find difficulty achieving strategic objectives (Schuler, 1989).

Schuler (1989) offered a human resources strategic management model based on competitive strategies. The first strategy offered was cost reduction which strives to increase productivity, defined as output cost per person. Cost reduction strategies can mean reductions in workforce or in wages, or it can be achieved through subcontracting, work redesign, automation, procedural changes, and job flexibility.

The role of the employee in a cost reduction strategy requires a certain behavioral profile: (a) relatively repetitive and predictable behaviors, (b) short term focus, (c) autonomy and initiative, (d) modest concern for quality, (e) high concern for quantity, (f) strong focus on results, (g) low risk taking, and (h) stability. The human resources management practices prescribed are (a) fixed and stable job descriptions, (b) narrowly defined jobs and narrow career paths, (c) short term, results oriented performance

appraisals, (d) compensation levels consistent with the market, and (e) minimal employee training.

The second strategy Schuler described was quality enhancement which strives to produce and deliver the highest possible quality goods or services. The employee profile necessary for quality enhancement contains (a) repetitive and predictable behaviors, (b) long-term focus, (c) some level of cooperative behavior, (d) a high concern for quality, (e) a modest concern for quantity, (f) a high concern for process, (g) low risk taking, and (h) commitment to organizational goals. The human resources management practices prescribed for quality enhancement are (a) fixed and explicit job descriptions, (b) high levels of employee participation, (c) both individual and group criteria for performance appraisal, (d) some guarantees of job security, and (e) extensive and continuous employee training.

The third strategy discussed was innovation. For an innovation strategy to work, employees must have (a) a high degree of creativity, (b) long-term focus, (c) high levels of cooperation, (d) moderate concern for quality, (e) a moderate concern for quantity, (f) an equal concern for process and results, (g) high risk taking, and (h) a high tolerance for ambiguity. The human resources management practices needed for innovation are (a) jobs structured around interaction and cooperation, (b) performance appraisals that reflect long-term and group performance, (c) job mobility and flexibility, (d) compensation systems based

on internal criteria rather than external or environmental criteria, (e) compensation from sources other than pay such as stock and bonuses, and (f) broad career paths.

Assuming that organizational effectiveness is the goal of most organizations and that organizational effectiveness is increased as conflicting cues and reinforcers within the organization are decreased, Schuler suggested three propositions:

1. Organizations pursuing a cost-reduction strategy should be more effective to the extent they also pursue a utilization philosophy of human resources management.

2. Organizations pursuing a quality enhancement strategy should be more effective to the extent they also pursue an accumulation philosophy of human resources management.

3. Organizations pursuing an innovation strategy should be more effective to the extent they also pursue a facilitation philosophy of human resources management (p. 172).

Schuler continued that, although these propositions might seem straightforward and testable enough, they are potentially, and most likely, contingent on the relationship between competitive strategies and business life-cycle stages. The contingency is based upon the fit among the life-cycle stage of the organization, the chosen strategy, and the changing demands of the environment.

The complexity of the contingencies proposed by Schuler suggests that few organizations are able to achieve an appropriate match of strategy with environment.

Inappropriate matches generally result in partial and ineffective change plans which serve to frustrate managers and the people who work for them (Emerson, 1985).

Ineffective changes are dangerous for the organization's future.

Emerson (1985) suggested that planned changes in the organization must be effective at the grass-roots level or strategic planning is nothing more than a paper and pencil exercise. If the desired changes do not take place at the grass-roots level, Emerson argued, the structure of the planning process itself will undergo unpredictable and usually undesirable changes. Further, and more importantly, the process of internal communication which ultimately affects the balance of power and how things get done in the organization will change in unpredictable ways. Because of these possibilities, the corporate planning process is becoming more directed toward supporting the governance role of the board of directors and less directed toward the management process.

The planning process has become overly dependent on numbers and techniques which have replaced judgement and experience. Planning at the executive level has become a substitute for decision making and responsive action. Emerson suggested that planning can translate management

into a portfolio analysis exercise, but cannot transmit a feel for the business. It is not enough to establish a broad sweeping plan and then hand it down to line managers, nor is it appropriate to have line managers develop their own plans in isolation and submit them to corporate. The key, argued Emerson, is managing employee attitudes. Communication, explaining what is going on, must be regular and consistent in content. Correcting the company's problems through the planning process is doomed to failure. The only way to maintain the flexibility required to cope with the changing environment is through internal relationships and team building.

Despite such discussions in the literature, on those rare occasions when human relations issues are incorporated into the strategic plans, they are usually the result of knee-jerk reactions by managers to some immediate problem or attempts to incorporate faddish management theory rather than rational efforts to support organizational goals (Gehrman, 1979).

Cultural Aspects of Strategic Planning

Lamb and Shrivastava (1986) insisted that two of the most intractable problems of strategic management are strategy implementation and strategic performance. "These topics are intractable because they are new, ill defined, complex, and not amenable to study through simple discipline-bound frameworks of analysis" (p. xi). This intractability discourages research on these problems, and

therefore little research is published. The problems of implementation and performance measurement are the most critical problems facing strategy practitioners. Brilliant strategies are quite useless if they cannot be implemented and their subsequent performance evaluated.

After tracking the strategic planning process at Air Canada from 1937 to 1976, Mintzberg, Brunet, and Waters (1986) concluded that the forces that encourage planning and the planning process can actually impede strategic change. Operational planning discourages strategic thinking: "The more an organization relies on planning in the formal sense, the less likely its people are to think strategically and the less inclined it will be to undergo strategic change (as opposed to elaboration or extrapolation of given strategic direction). . . . Formal strategic management may prove incompatible with real strategic thinking" (p. 4).

The conclusion of Mintzberg et al. implies that the formal planning process becomes an organizational ritual. The organization's culture can itself become a major deterrent to success when the success model, or how the organization characterizes successful strategy, changes. Ernest (1985) observed that strategic plans and their resulting changes and reorganizations that might work very well on paper frequently do not work as expected. The latent outcomes of strategic planning are usually the result of unseen or misunderstood factors associated with the organizational culture. After studying aerospace

manufacturing firms, retail chains, and electronics companies, Ernest concluded that the cultural dimension is a major component of organizational success in implementing strategic plans. There must be a fit between planning and beliefs, and values and practices within the organization.

Ernest defined culture as "a system of shared values and beliefs that actively shape the company's management style and employees' day-to-day behaviors" (p. 51). Culture is generally rooted in the values of the company's founders and, to some extent, those of current senior managers. Cultural feedback loops reinforce successful behaviors which are continuously repeated. As levels of consistency increase, the strength of the culture increases. Top managers may not have an adequate handle on corporate culture if the founders are gone and their own values are not accurate reflections of the founders'.

Ernest assessed 100 organizations using a 60 item survey of management practices. The survey revealed five orientations critical to defining a company's culture: marketing orientation, employee orientation, problem-solving orientation, innovative orientation, and service/quality orientation. Profiles of each company were developed indicating its level on each of the five orientations. Relationships between profiles and major problems were established. Cultures were categorized on two dimensions: action and people. Action involves decision making, organizing, monitoring, implementing plans, and generating

ideas. Companies were categorized as either participative or nonparticipative relative to their employees. The two dimensions, action and people, reflected the balance of tasks and roles within the organization.

Ernest found that four types of cultures emerged from the study, and these can be generalized to the emergence of culture in relation to a company's position on the action and people dimensions. Interactive cultures emerge from organizations that are both reactive and participative. Interactive cultures are highly people oriented and service oriented. Integrated cultures emerge from organizations that are both proactive and participative. Integrated cultures are also people oriented but tend to be more effective in identifying and solving problems than interactive cultures. Systematized cultures emerge from organizations that are both reactive and nonparticipative. Systematized cultures are generally focused on routine work, operating procedures, and external regulations. Entrepreneurial cultures emerge from organizations that are both proactive and nonparticipative. Entrepreneurial cultures are oriented toward the rapid development of products and services.

The importance of Ernest's concept to planning is the match of strategy to organizational culture. For example, a service oriented company may not be expected to be good at developing new products. In addition, various implementation strategies might be effective in one culture

and not effective in another. The type of culture is important to understand when planning elements of human resources, compensation, and performance appraisal.

Ansoff and Baker (1986) agreed with Ernest's conclusion that culture is one of the key determinants of an organization's success in strategic planning. Ansoff and Baker hypothesized that the culture is influenced by "fashionable" solutions, one of which is the idea of changing an organization's culture. These solutions tend to replace one another over time. In the early 1900s, product orientation and the development of products dominated corporate culture. By the 1930s, product orientation had been replaced by a market orientation and the development of markets. By the 1960s, strategy orientation and the development of strategies had become the dominant cultural theme. Ansoff and Baker concluded that as the success model undergoes continuous change in the corporate environment, the culture becomes critical as a key deterrent to success in strategic planning.

Ross and Shetty (1985) suggested that the new strategic challenge is to change corporate culture from a productivity orientation to a quality orientation. Their study of 2,000 business units in 300 manufacturing and service organizations demonstrated that improving quality in products and services increases both market share and profit margins. New strategies should include quality as a competitive advantage. The current systems of quality

control are ingrained in many corporate cultures and generally contribute to poor quality by detecting rather than preventing defects. Success in the future will not only be a function of defect-free products but of public perception of high quality. To increase public perception of quality, corporations must reflect public values. Because perception of quality is difficult to quantify, measurement of it has to be based on cultural values of the company. Therefore, public values must be included in the company's value system.

One strategic cultural device that is currently being used to compensate for high energy and material costs and incorporate the values of efficiency and accuracy is Manufacturing Resource Planning (MRP II) systems (Melnik & Gonzales, 1987). MRP II systems are of interest because one was installed at General Dynamics, Electronics Division during the time of the study. Melnik and Gonzales (1987), in a survey of MRP II firms, found that implementation of MRP II usually requires corporate cultural changes. MRP II is a complex system of material requirements and shop floor planning and scheduling that requires a strong commitment by top managers to effect the changes necessary to make its implementation successful. The commitment must be in time and dollars to educate and train employees at every level of the organization, to enforce the discipline required to do mundane and repetitive tasks well, and to provide the tools necessary to maintain high degrees of record accuracy.

Melnyk and Gonzales characterized the typical manufacturing culture as shrouding production capacity, master scheduling, and shop floor planning in mystery. To successfully implement MRP II, the mystery must be removed from scheduling and planning, and they have to be understood at all levels of the organization so that everyone involved with production can develop and commit to realistic build schedules that reconcile customer demands with production capabilities. MRP II systems must be integrated into the strategic plans of the company, and strategic objectives consistent with MRP II must become integrated with cultural values. MRP II systems require and facilitate cooperation among engineering, manufacturing, procurement, and marketing functions. MRP II systems reduce interdepartment conflict, alter the nature of institutionalized strategic planning processes, link functional areas where barriers existed previously, provide smoother transitions to new changes than previous change systems did, formalize and standardize information, and provide linkages between strategic objectives, operating plans, and production goals.

MRP II systems have achieved the status of panacea for a multitude of organizational problems and inefficiencies. One of their attractive features is the ability to play "what if" games. The ability to predict the future using systems such as MRP II has become more and more important to business. "The more unpredictable the world becomes, the more we seek out and rely upon forecasts and predictions to

determine what we should do" (Gimpl & Dakin, 1987, p. 57).

Gimpl and Dakin (1987) examined the available research on planning practices and concluded that managers' obsession with the magical rites of long range planning and other future oriented techniques is a manifestation of anxiety-relieving, superstitious behavior. Forecasting and planning have the same cultural function as magical rites; they make the world seem more deterministic and increase confidence in coping mechanisms. In addition to uniting managers as a group and inducing them to take action, these rites preserve the status quo.

Methods of prediction or telling the future, such as tarot cards, reading entrails, and astrology, have been created and used during times of great uncertainty, particularly when the various possible outcomes potentially have a significant impact on the existing way of life. Uncertainty in the business environment brings out the consultants, organizational development specialists, and other cultural soothsayers who direct the proceedings and interpret omens. Gimpl and Dakin suggested that long range planning is ideal to calm the discomfort that managers feel facing a random world. When managers look into the future, they choose a view that requires little change and then look for supporting data. Strategic plans that recommend radical changes in allocation of resources, corporate behavior, fundamental missions, and corporate goals are likely to be met with no action.

Managers rarely try to justify the success of planning processes by comparing the plan to actual practice. Long range planning is justified, according to Gimpl and Dakin, by secondary benefits like increased communication or commitment and not on the basis that the plan was followed and the predicted results were realized. Strategic planning has symbolic value. Planners can never be proved wrong: They simply did not take all the complex contingencies into account.

A low tolerance for ambiguity induces managers to develop the illusions of control. Gimpl and Dakin defined ambiguous situations as those situations that cannot be classified because they are new, those situations that are too complex to be analyzed, and those situations that contain contradictory elements or structures. Japanese managers tend to feel more comfortable with ambiguity and will use it to their advantage. Western managers feel strongly that they must make decisions as opposed to make choices. Decision making implies a level of control. If enough facts and data are gathered, the ambiguity is thought to be removed and an optimum decision can be made. This type of thinking creates the illusion of control.

Gimpl and Dakin concluded that superstitious behavior in management has two functions. Under conditions of extreme ambiguity, superstitious behavior will stave off the tendency to do nothing by reducing anxiety. Secondly, superstitious behavior will promote random action which is

better suited to a random world. Regular patterns of behavior are less likely to meet with success in a random situation than random patterns because random patterns tend to cover unfamiliar ground and generate new responses. Magical planning generates confidence in ambiguous situations, generates cohesiveness in the management group, increases faith in the future, and minimizes bias created by regular patterns of behavior.

Summary

Strategic planning is a process within which organizations can determine their identity, their position in the environment, their direction, and how to get to where they want to be. The planning process allows organizations the opportunity for introspection and internal assessment. In addition, strategic planning assures that organizational decisions will be consistent with the organizational mission, and helps to smooth out the process of change. The process of planning is at least as important as the plan itself, and should be understood as a thought process and not simply a set of procedures or exercises. The planning process provides the framework for organizational learning.

Strategic planning requires the involvement and support of all levels of management, particularly top management. Strategic planning is not a panacea nor will it effect miraculous recoveries. Strategic planning cannot be used to solve immediate problems in the organization. The planning system must be tailored to the situation and the

organization, and cannot be utilized without a thorough understanding of the organization's power structure and political climate. Planners cannot simply rely on rationality and quantification, but must incorporate political, social, and environmental aspects into the planning process.

Strategic planning also allows organizations to examine their place in the environment. For an organization to compete for and retain legitimacy, it must be clear on its own value to society and its intention to serve its own employees as well as the community. The planning process must optimize the relationship of the organization with its environment. The strategic plan must contain an element of human relations and an element of public policy.

Companies may vary in culture not only as a result of their collective beliefs, values, and behaviors, but as a result of the content of their strategic plans and planning processes. The nature of the role, product, or market orientation a company chooses in relation to society can affect how members see themselves in relation to each other and in relation to the community. Conversely, the organizational culture can influence the choice of role, product, and market orientation.

Organizational Change

Once a strategic plan is adopted in an organization, the next step is implementation. The implementation of a

plan almost always requires some directed changes in the organization. Of course, not all organizational changes are the result of the implementation of a plan, some may occur as a result of pressure from the environment and some may occur as the informal structure of the organization changes. Organizational changes can be viewed from three essential perspectives: the structural perspective or the traditional management approach, the psychological perspective or the individual's involvement in the change process, and the cultural perspective or the group reaction to and creation of change.

Structural Aspects of Change

An understanding of organizational change must necessarily begin with a discussion of what is changed. Organizations are merely human constructs that represent defined human activities. Mintzberg (1979) suggested that organized human activity requires two fundamental and opposing elements: the division of labor into tasks to be performed, and the coordination of tasks into activities. "The structure of an organization can be defined simply as the sum total of the ways in which it divides its labor into distinct tasks and then achieves coordination among them" (p. 2).

Mintzberg specified five major divisions of labor that every organization has even if more than one division is performed by one person. The first division of labor is the operating core. The operating core performs the basic work

that is generally characterized as the organization's reason for existence. The operating core directly produces the organization's products and services by procuring the production inputs, processing the inputs into outputs, distributing the outputs, and providing direct support to the input-process-output cycle. The second division Mintzberg called the strategic apex. The strategic apex ensures that the organization serves its mission in an effective way, and also serves the needs of those who have power or control over the organization. The strategic apex has three sets of duties: direct supervision, managing the organization's boundary conditions and its relationship with the environment, and developing the organization's strategy. The third division is the middle line, those middle level managers that join the strategic apex with the operating core. The fourth division is the technostructure. The technostructure is comprised of analysts who design the work, plan the work, change processes and procedures, and train operators, but do not do the work themselves. The technostructure effects standardization in the organization. The fifth division is the support staff. The support staff provides support activities that are not directly related to the work flow such as building maintenance and switchboard operation.

Mintzberg outlined five basic mechanisms used by organizations to coordinate work: (a) mutual adjustment, (b) direct supervision, (c) standardization of work

processes, (d) standardization of work outputs, and (e) standardization of work skills. These five elements should be considered the glue that holds the organization together.

Mutual adjustment, according to Mintzberg, is pure and simple direct communication between workers. Mutual adjustment places control of the work in the hands of the workers. It is the simplest coordinating mechanism, but it is also the only mechanism that works under extremely complex and difficult conditions.

Direct supervision uses one individual to coordinate the work of others by giving instructions and monitoring actions. The mechanism of direct supervision is generally the most favored coordination mechanism because of the concept that control passes to a single mind which in turn controls others.

Mintzberg specified three different standardization mechanisms to distinguish a hierarchy of preference. Standardization of work process is the preferable coordinating mechanism because it is least affected by individual differences. Standardization of the work process requires specification of procedures and design of the environment to control the content of the work. Under these standardized conditions, the worker needs little if any supervision and very little mutual adjustment communication.

Standardized output is the second most preferable mechanism. Standardized output specifies the exact dimensions of the output. Here, the process is of no

consequence, and little direction or communication is required. The worker is free to arrive at the output by any means available.

Standardization of skills depends entirely upon the training and skill of the worker. This is the kind of coordinating mechanism one might find in an operating room, where every person involved must rely upon personal training and experience rather than communication, direction, procedure, or output specifications even though these mechanisms may be used to some extent.

Mintzberg hypothesized that as the organization becomes more complex, the coordinating mechanisms form into an evolutionary cycle from mutual adjustment to direct supervision to standardization back to mutual adjustment. Direct supervision and mutual adjustment can also be used as informal mechanisms to gain power. Often the formal and informal coordinating mechanisms within an organization are indistinguishable.

Because of the real-life melding of formal and informal structures observed by Mintzberg, there are relatively few models of organizational change that focus on practical application. Mintzberg (1979) complained that organizational research generally fails to relate structure with the functioning of the organization; in other words, research literature on organizational theory lacks context. Bedeian (1980) asserted that careful assessments of organizational change efforts are extremely rare, and even

careful assessments are misleading. The criteria for success for the planned changes are typically multiple and generally vague, and a given investigator is equally likely to focus on the successes or the failures of the change instead of a proportional representation. In addition, assessments of change are expensive and time consuming, and specifying, let alone explaining, the results of whatever has been produced is difficult and may be beyond the available expertise in the organization.

Beckhard (1979) presented a model of change which he claimed has had a history of high utility. The model for change planning has four major steps: (a) defining the change problem, (b) determining readiness and capacity for change, (c) identifying resources and motive for change, and (d) determining the intermediate change strategy and goals. When the planned change affects a large system, the proposed change must be evaluated in relation to the environment, to changes in management strategy and organizational structures, to changes in the ways work is done, and to changes in the reward systems. In addition, Beckhard suggested, the change must be maintained once it has been implemented.

A fair amount of organizational literature has been devoted to distinguishing the characteristics of successful versus unsuccessful change in organizations (Robbins, 1987). When examining change in an organization, there are basically two points of view: mechanistic and humanistic.

Both points of view consider manipulation of the organization not only appropriate, but necessary for its survival. Both points of view are concerned almost exclusively with the outcomes of the change.

The mechanistic view holds that people are basically components in the organizational machinery and concentrates on measures of performance. Organizational performance, if properly planned and ordered, will be increased. For example, Robbins (1987) suggested that organizational effectiveness has been measured by overall ratings, productivity, efficiency, profit, quality, accidents, growth, absenteeism, turnover, job satisfaction, motivation, morale, control, conflict/cohesion, flexibility, adaptation, planning and setting goals, goal consensus, internalization of organizational goals, role conformance, managerial interpersonal skills, management task skills, information management and communication, readiness, utilization of environment, evaluation by external entities, stability, value of human resources, participation and shared influence, training and development emphasis, and individual achievement emphasis.

Robbins proposed four models of effectiveness that may be used to evaluate change: (a) goal attainment, (b) systems, (c) strategic constituencies, and (d) competing values. Under the goal attainment model, the organization is effective when it accomplishes its stated goals. Under the systems model, the organization is effective when it

acquires needed resources. Under the strategic constituencies model, the organization is effective when all strategic constituencies are at least minimally satisfied. Under the competing values model, the organization is effective when the organization matches its emphasis on return on investment, market share, new product innovation, and job security with constituent preferences.

The humanistic model still considers people to be elements of the organizational mechanism. But because people are the primary element, and people are less than perfect mechanisms, a therapeutic approach applied by internal agents, external agents, managers, or CEOs can make them more productive. Hopeful in the 1970s that therapeutic psychology could be applied to the business world, the emphasis of organizational theorists was on organizational development as a tool for management to affect humane manipulation of the organization. Franklin (1976) studied change processes in 25 different organizations (11 successful and 14 unsuccessful) to determine any consistent factors that might contribute to successful change efforts. Franklin identified eight specific factors that seemed to contribute to successful change: (a) an organizational reputation for innovation, (b) contact with external change agents prior to implementation, (c) a focus on specific problems rather than general problems, (d) a commitment to survey feedback method of organizational development, (e) commitment to the change efforts by top management, (f) the

change program was presented as part of a total development effort rather than as an add-on, (g) there was a commitment to no more than a four year time frame for a single project, and (h) internal change agents were carefully selected.

From the eight factors, Franklin proposed three general factors that distinguish successful from unsuccessful change plans. The first factor is that successful changes are normally the result of environmental pressure. The environmental factor was supported by Alderfer (1977) who stipulated that change techniques must include environmental issues. The second factor proposed by Franklin stresses the importance of commitment by the top managers. Senior executives must have priorities that are consistent with the change plan. The third factor is that internal change agents must be chosen to champion the cause and effectively communicate the desired message.

Dunn and Swierczek (1977), in a comprehensive review of organizational change literature, insisted that organizational practitioners do understand the relationship of theory and practice. Dunn and Swierczek analyzed 67 case studies conducted from 1945 to 1975 and found that (a) change efforts that are collaborative are more successful than those that are unilaterally directed, delegated, or subordinate directed, (b) participative change agent orientation is associated with effectiveness as compared to nonparticipative orientations, and (c) participative change efforts are more effective than nonparticipative ones.

Clearly, the findings of Dunn and Swierczek (1977) stress the importance of participation among top managers, change agents, and all other organizational members in a therapeutic relationship. This conclusion is consistent with the conclusion of Friedlander and Brown (1974) that change efforts must be supported by collaborative involvement of all participants. But the issue of environment as an important factor in outcome has not been settled in humanistic change models. Unlike Franklin (1976) and Alderfer (1977), Dunn and Swierczek (1977) concluded that the environment does not affect the outcome. Dunn and Swierczek also concluded that the type of organization does not show any relationship to change outcomes. The assumption seems to be that the members of an organization, under the appropriate internal conditions, will always behave in the organization's best interest.

More characteristic of organizational literature in the 1980s is a focus on therapeutic managerial behavior and its effect on organizational change. Hersey and Blanchard (1982) identified two sets of skills and knowledge needed by change agents in organizations: diagnosis skills and implementation skills. The diagnostic process used by these change agents includes three steps: (a) determination of the point of view, (b) identification of the problem, and (c) analysis of the situation.

After the diagnostic process is complete, change agents must plan and implement a change program. The

implementation of a change program involves identifying alternative solutions to the problem and developing a change strategy. Hershey and Blanchard suggested that there are three broad theories used to develop change strategies: force field analysis, change cycles, and patterns of communication. Force field analysis, a technique developed by Lewin (1947), used an assessment of driving forces and restraining forces to determine change strategy. Change cycles can be implemented through a participative change or a directed change according to the level of change: knowledge changes, attitude changes, individual behavior changes, or group changes. Patterns of communication in the organization along with patterns of intergroup conflict must be analyzed, defined, and considered in the change strategy.

Phillips (1986) attempted to identify Chief Executive Officer (CEO) behavior in a typical corporate change pattern. Phillips suggested that once the CEO decides to commit to a new strategy, he or she then proceeds to change the organization in a manner consistent with the new strategy. After a series of announcements, organizational shakeups, and personal talks around the company, the CEO usually withdraws to let the line managers take over. At this point, according to Phillips, the big change usually tapers off. It declines because the conventional approach to change is not well suited for dealing with habitual behavior, parochial priorities, and the current distribution of power and influence.

After studying a successful change in a chemical company, Phillips concluded that successful change strategies include elements that are substantially different from conventional strategies. To launch the change program, the CEO of the chemical company announced the change and reinforced the objective by running a contest for the best slogan to describe the change objective. Next, the CEO modified the organizational structure by bringing lower level managers up to key positions where interest and backgrounds were aligned with the new objectives, and moving staff level executives to new positions where they could broaden their experience. Following the organizational restructuring, the CEO used a series of dramatic and symbolic ceremonies and techniques to highlight organizational role changes in management and the managers' new responsibilities. In addition, the CEO communicated the changes with customers and the community.

A follow-up survey of customers one year after the announcements indicated that 47% had noticed a significant improvement in service. Phillips concluded that the approach used clarified exactly what the new objectives were and how the organization was changed to achieve them, explicitly and unmistakably contrasted the old with the new, dramatized the change to increase both emotional and intellectual understanding, and decisively shifted the power structure.

Summarizing his studies of successful changes in various companies, Phillips suggested six distinctive differences that successful strategies have from conventional strategies. First, communication of what needed to be done differently was directed at all levels of the organization through a concerted communication program. Second, efforts were made early on to demonstrate new methods of operation. Third, aggressive changes were made to standardize operating procedures. Fourth, top managers played remarkably visible roles in the change process for extended periods of time. Fifth, top management stressed the positive aspects of the changes through rewards and incentives. And sixth, managing the change program became the agenda of senior managers.

Psychological Aspects of Change

During the 1970s, a movement toward concern for the welfare of the individual prompted a great deal of literature devoted to managing change by understanding the psychological profile of organizational members. This literature differs from that previously cited in that it focuses on the adjustment process of the individual rather than on the intended outcomes. The assumptions of this area of the literature center on the notion that change itself cannot be controlled but that the perspectives of the people involved can. If the therapeutic manager handles the transition properly, resistance to change will be minimal and probabilities for success will increase. The amount of

such literature is vast, but highly repetitive. Therefore, a small, selected sample of the writing on this topic should produce sufficient background in relation to the present study.

There are generally two different perspectives of the psychological aspects of change: the perspective of the change agent (the changer) and the perspective of the group member (the changee). As mentioned above, many authors suggested that these two roles be combined through participative change efforts. Yet, there is no literature that suggests that anyone remains apathetic to change; a given member of an organization is either in favor of the change or resistant to the change. Possibly organizational members who might be apathetic to change are not worthy of attention by organizational theorists because they do not help nor do they hinder change efforts. Regardless, the "for" and "against" attitudes are the primary elements of focus. The literature, then, falls into two categories: the psychological profile of the successful change agent, and methods for overcoming resistance to change.

Outside consultants who operate as organizational change agents have expended some effort to evaluate their own effectiveness in a highly competitive environment. Hamilton (1985) concluded that 20% of the consultants perform 80% of the effective work in organizational change. But the primary focus of change agent effectiveness literature is on traits or skills needed by agents to do

their work (Argyris, 1970; Bennis, 1969; Burke, 1982; Steele, 1982).

Hamilton (1988) conducted an extensive review of the literature to compile a list of factors that are supposed to predict a change agent's effectiveness. Hamilton organized the factors into three general categories of effectiveness characteristics: (a) openness and responsiveness to others' needs and concerns, (b) comfort with ambiguity and the ability to make sense of it, and (c) comfort with oneself in relation to others (p. 40).

Hypothesizing that personality characteristics and behavioral tendencies of effective organizational development consultants differ significantly from those of less effective consultants, Hamilton tested the validity of predictive factors on a sample of 105 organizational development consultants employed by the United States Navy. A comparison of psychological profiles measured by three personality inventories and effectiveness ratings measured by supervisor and peers rating scales indicated the following results:

1. Mental agility (a large capacity for making sense of ambiguous situations) and a friendly cooperative disposition were both positively related to consultant effectiveness.
2. Detail orientation, concern about facts and figures, procedural orientation, and high need for tangible

results and specific direction were negatively related to consultant effectiveness.

3. The need to work within defined boundaries was negatively related to consultant effectiveness.

4. The ability to look for new patterns and see meanings, relationships, and possibilities beyond the immediate senses was positively related to consultant effectiveness.

5. Individuals who were venturesome, trusting, relaxed, or imaginative were more likely to be effective consultants than individuals who were shy, suspicious, tense, or practical.

In light of her findings, Hamilton concluded that certain personality characteristics found in effective consultants differ significantly from those found in less effective consultants.

While there is no apparent research linking the psychological profiles of the changer with the changee, there is considerable speculation on the reactions of individuals to change. Hampton, Summer, and Webber (1982) identified some psychological aspects of resistance to change including rejection of the change agent, satisfaction with the current situation, unwillingness to admit ignorance, the influence of past history, the protection of parochial authorities, and methods of blocking undesired change. The above aspects of resistance should be considered when developing a change implementation plan, or

the most obviously beneficial changes may not be successful. One of the critical elements of the potential probability of resistance to change and the effects of that resistance is the character of the innovation and how that character manifests itself in the implementation activities.

Hampton et al. specified three categories of technical innovation: routine, distress, and opportunity. Routine innovation is a small-step technological advancement programmed by management, and is characterized by well-defined procedures for development, measurement, and implementation. Distress innovation is the result of economic and/or environmental pressure, and is characterized by insufficient resources and planning. Opportunity innovation is used to supplement or replace existing products of services, and is characterized by sufficient funding and planning.

Hall, Goodale, Rabinowitz, and Morgan (1978) studied routine innovation in departmental and job characteristics over a ten month period in the transportation ministry of a large Canadian province. They found more favorable attitudes in departments that did not change than in departments with either "positive" or "negative" changes. Hall et al. concluded that people tend to not like changes. Following this conclusion, Kanter (1985) proposed ten reasons why people tend to resist changes.

Kanter's first proposed element of resistance concerns the perceived control of the change. Change can be exciting

when an individual chooses the nature and parameters of the change. However, when the change decision and process is in someone else's control, change can be threatening. This element of resistance, according to Kanter, can best be managed through the participative management technique.

The second element concerns too much uncertainty. Kanter suggested that not knowing the next step leads to anxiety about the change process. This element of resistance can be overcome with consistent, effective communication at every step of the process.

The third element concerns what Kanter called the surprise factor. The surprise factor is created by decisions and actions that are released without sufficient preparation or groundwork. The response by individuals to something totally unexpected is shock and defensive posturing. The most common area for the surprise factor, according to Kanter, is in organizational changes. Management typically waits for all organizational decisions to be made before releasing any information about them. This element of resistance can be minimized by properly timed communication.

The fourth element Kanter called the difference effect. The difference effect is the experience an individual has when forced to reevaluate familiar routines and habits, which used to constitute the correct way of doing things, under the assumption that there is something wrong with them. The necessity of thinking through new ways of doing

things requires more energy and effort than old habits and can result in excessive fatigue and burnout. The remedy for the difference effect is to minimize the new ways of doing things, and to leave old routines and habits in place as much as possible.

The fifth element is related to the fourth. The difference effect, in addition to requiring new habits, brings into question the individual's judgement in the former adherence to a way of doing things that has now been labeled incorrect or inefficient and the individual loses face. People will sometimes commit to a course of action that is contrary to their long-term best interests to avoid losing face. To minimize the effects of losing face, past action can be brought into perspective as a step in an evolutionary process.

The sixth element involves individuals' concerns about remaining competent in the changing environment. Competence anxiety can be minimized by education and training in the new methods and procedures required by the proposed change.

The seventh element Kanter called the ripple effect. Resistance to change can be caused by the disruption of work-related or personal plans and projects to which people had committed before the change began. Kanter did not specify remedial action except to suggest that change agents must be sensitive to the potential for the ripple effect.

The eighth element of resistance is that the change will result in more work, more energy, and more time.

Kanter argued that anxiety related to the idea that more work will be required causes less anxiety and is based in reality. It is rare, if ever, that change can be successfully implemented without diligent and sometimes painful efforts. But the successful change agent will have prepared all members of the organization to understand and accept their roles in the change, and motivate them to put forth the required effort.

The ninth element is the history of antagonism and resentment that exists between certain members of every group. Unresolved grievances from the past almost certainly will arise to interfere with the change efforts. The only possibility for the change agent to overcome these hindrances, according to Kanter, is to identify and resolve them.

The tenth element of resistance proposed by Kanter is the most reasonable: The change may really be threatening. Real personal danger usually creates a defensive response, and there is little a change agent can do about it except to avoid pretense and false promises and deal with the resistance as well as possible. Kanter suggested that resistance to change is not irrational, and change agents can only be successful by developing an understanding of and strategies for the inevitable psychological resistance to any change program.

Cultural Aspects of Change

The psychological perspective of organizational change has become less prevalent as organizational theorists have discovered that anthropological explanations of culture better explain the behavior of individuals within the context of the group or organization. Kanter (1985) suggested that the change agent can effectively deal with resistance to change by developing rituals of parting or ceremonies that move symbolically from the past to the future, stressing future opportunities. Robbins (1987) determined that an organizational perspective of change differs among cultures on certain key characteristics: the importance of individual initiative, risk tolerance, the clarity of organizational direction, organizational structural integration, the levels of management contact, the levels of procedural and behavioral control, member identity, reward systems, conflict tolerance, and communication patterns.

Argyris, Putnam, and Smith (1985) used a psychological framework to show how individual characteristics and resulting actions form into a cultural format that guides the manner in which organizations learn things and thus affect the manner in which the organization changes. Certain cultural governing variables in the organization create action strategies which, in turn, have certain consequences. The utilization of the consequences in the development of the governing variables and the action

strategies constitutes the organization's theories-in-use. When consequences are used to modify action strategies, this is known as single-loop learning. When consequences are used to modify governing variables, the organization is using double-loop learning. The learning pattern of the organization determines to some extent the manner in which the organization will effect change.

One recent cultural change in some organizations has been the movement away from control oriented management to participative management (Lawler, 1988). Lawler (1988) found three distinct strategies for involving employees in decision making: (a) parallel suggestion involvement, (b) job involvement, and (c) high involvement. Each of these three strategies vary on four elements or features: (a) information about organizational performance, (b) rewards based on organizational performance, (c) knowledge that enables employees to understand and contribute to organizational performance, and (d) power to influence organizational direction. Each strategy moves control of information, rewards, knowledge, and power down into the organization to different degrees.

The parallel suggestion involvement strategy moves the four elements down into the organization the least of the three strategies, and is the oldest approach to employee involvement. Employees are asked to produce ideas, suggestions, and problem solutions that will influence how the organization operates. This can be accomplished through

suggestion programs, quality circles, and methods improvement programs. Rewards in a parallel suggestion strategy are typically based on cost savings or gainsharing. Based on a review of related research, Lawler concluded that parallel structure can lead to increased organizational performance and cost savings, and that employees can be more satisfied with their work than in noninvolvement organizations. The limitations of a parallel structure focus around the character of the strategy as a program or temporary system in the organization. Cost savings suggestion programs are expensive to run and difficult to maintain, they run out of suggestions and knowledge to solve complex problems, they are generally resisted by middle managers because of the threat to their power base and the extra work created by the need for responses to the suggestions, they usually create some sort of conflict between participants and nonparticipants, and the suggestion programs are rarely supported consistently by the reward systems. Lawler observed that parallel structure systems may go on for a period of time, but they tend to disappear after awhile and they do not change the organization's way of doing business.

Job involvement focuses on enrichment of work to motivate employees to better levels of performance. Job enrichment creates jobs that give feedback, increases individual influence in work methods, requires a variety of skills, and provides a comprehensive task to perform as

opposed to a task component. Autonomous task groups, as a form of job involvement, are the primary unit of involvement. All group members are equally responsible for group objectives and performance. Group approaches require interpersonal skills that may not be required in basic job enrichment strategies. Reward structures are different in group approaches, and groups can have more decision power than individuals. For example, teams may make personnel decisions and select supervisors.

Lawler found that job involvement technology can result in improvements in productivity, quality, absenteeism, and turnover. The effective use of this approach depends on the technology of the workplace. Teams are appropriate when the task is too complex for one individual, such as in chemical plants, oil refineries, banks, and airlines. The individual approach to job involvement is appropriate for organizations where the technology allows an individual to do the whole task or service. Job involvement approaches limit the contributions that individuals might ordinarily make to strategic decisions because the individuals are limited to immediate work decisions. To be effective, job involvement approaches must be part of the strategic objectives and incorporated into the business plans to receive the sustained commitment of management and supervision.

High involvement strategies require the organization to be structured so that people at the lowest levels have a sense of involvement in the performance of the total

organization. According to Lawler, high involvement strategies contain the elements of job involvement, suggestion involvement, and team approach, but they differ in the kind of information shared and decision, power, and reward systems. In high involvement, employees are not only asked to make decisions about their work activities, but to play a role in the organization's strategic decisions. Rewards are generally based on organizational performance rather than individual performance.

Lawler reported that there are relatively few data on high involvement organizations because there are so few examples to study. Most examples are self-contained manufacturing units in isolated locations or new startups. Existing research (Lawler, 1986) indicated that high involvement organizations tend to be low-cost, flexible, and adaptive organizations, and they tend to be quality and customer oriented. High involvement approaches require a high initial investment in employee selection, training, and system development, and are not appropriate for every business. The primary determinants of which involvement strategy should be used in a given organization are the nature of the work it does, organizational technology, organizational values, and the characteristic management approach used by the organization. The organization's work and technology are centered around two critical aspects: the extent to which individuals need to coordinate their activities, and the relative complexity of the work

involved. High interdependence favors a team approach, while low interdependence indicates an individual approach. High complexity indicates a need for high involvement.

Lawler concluded that high involvement strategies require managers to believe that employees are a key organizational resource and will behave responsibly, consistent with the democratic principle. High involvement is not universally good for all organizations, but strategic analysis of where the organization is and where it wants to be can indicate the appropriate level of involvement.

The process of organizational change, from a cultural perspective, must necessarily be a process of socialization or resocialization. "As goal-oriented entities, organizations seek to influence, determine, and/or control the behavior of their members in directions consistent with their particular objectives. At the same time, members are attempting to define mutually acceptable and satisfying roles for themselves in the organization" (Fisher, 1986, p. 101).

Many authors have suggested that organizational socialization can be understood as a serial or stage process (Feldman, 1981; Graen, 1976; Schein, 1978; Van Maanen, 1976). But research tends only to support stage models when they are related to specific occupations or job content areas (Fisher, 1986).

An extensive review of the literature on organizational socialization was conducted by Fisher (1986). Fisher

critiqued the methodology of previous research in organizational socialization. Previous research has neglected to account for how individuals change during socialization and the potential outcomes of socialization. Socialization occurs when individuals cross a boundary in organizational role or status. There is relatively little systematic research on organizational socialization, and those few studies available do not include responses from the worst failures of socialization.

Most existing studies have focused on only a few occupational groups: police, nurse, military recruit, engineer, and graduate student. Very few studies examine more than one occupation within an organization. Fisher distinguished between occupational socialization, the socialization process found in professions that require lengthy training and complex skills, and organizational socialization, the socialization process that occurs when one enters an organization or during an organizational change, but conceded that the two may occur simultaneously.

Fisher defined socialization as primarily a learning and change process involving psychological categories of content. These categories of content might be (a) organizational values, goals, and culture, (b) work group values, norms and friendships, (c) job skills, knowledge, and procedures, and (d) personal change relating to identity, self-image, and motive structure. The socialization process can lead to destructive, rebellious

outcomes and cause disillusionment and turnover. On the other hand, socialization can lead to creative change for the organization and satisfaction and commitment in the organization's members. Fisher suggested that socialization research should include an examination of anticipatory socialization: all learning and experience that prepares an individual for a change.

Before learning can take place, the change agent must convince organizational members that the change is necessary. This may be accomplished through a process of unfreezing or unlearning old or outside cultural values and substituting new organizational values (Schein, 1986). There seems to be some evidence to suggest that individuals with low self-esteem are more likely to copy others, and are therefore more easily socialized (Weiss, 1978; Weiss & Nowicki, 1981). But Dalton (1979) disagreed, suggesting that increased self-esteem facilitates the change process.

Motivation to become socialized probably changes during the socialization process, people do not simply discard old values and adopt new values (Van Maanen, 1976). First, behavioral compliance is shaped through rewards and anxiety reduction, then organizational members learn to identify with the primary work group, and finally they internalize the new value structure. The effect of socialization on any group member depends on whether the change is affected on individuals or groups of individuals, whether the process is formal or informal, whether the process is structured and

sequential or random, whether or not there is a fixed time table, and whether the socialization is affected by peers or with a designated agent (Van Maanen & Schein, 1979). Weiss and Nowicki (1981) concluded that using peers as change agents may have the best chance of influencing behavior.

Organizational Culture

The Anthropological Perspective of Culture

"People go to work to find meaning in their lives" (Graves, 1986, p. 143). Meaning, and what people make of meaning, is the essential motivating factor in the socialization process. Cultural anthropology, which is the study of human custom and cultural behavior, explores certain questions about people in groups (Keesing, 1958): Why do humans behave the way they do? How did the customs of a particular group develop? How do the customs of one group differ from those of another? What things do all people have in common, the universals and constants? What is the nature of a cultural system? Can cultural processes be predicted and controlled?

The study of organizational culture derives from two fields of cultural anthropology: ethnology, the analysis of likenesses and differences among cultures, and social anthropology, which is concerned with developing generalizations about culture, society, and personality. Keesing (1958) defined culture as "the totality of learned, socially transmitted behavior, or 'custom'" (p. 16).

Keessing distinguished culture from society and from personality, defining society as "the aggregation of individuals in organized populations or groups" who share the same cultural beliefs (p. 16). Personality, from the perspective of social anthropology, is the collection of "characteristics of the individual particularly as a consequence of learning and training in a particular sociocultural milieu" (p. 16).

Cultural anthropology literature is rich in technique and perspective on the investigation of culture. From the above definitions, the conceptualization of organizations as societies within which characteristic cultures can be identified is both reasonable and justifiable. And the available organizational literature is generally sufficient to address the various questions of organizational culture. However, there is one area of anthropological literature which warrants some attention in light of the present study: the question of cultural determinism. The question of determinism is particularly important to the study of organizational culture because organizations are best characterized as part time cultures for their members. Organizational members bring one or more cultures from the larger society into the organization. Organizational members are socialized in a more pervasive culture before they even become aware of the organizational culture.

One of the best arguments in favor of cultural determinism was presented by White (1948). White argued

that even though some people believe strongly that culture can be controlled, evidence for this conclusion is scarce if not nonexistent. Faith that advances in science, technology, and philosophy give people the power to shape their own destiny is a weakly supported belief in light of the two world wars in the 20th century, and the ever-increasing and unnecessary complexities in life such as fashion trends and entertainment media. All complex social entities can be traced back to earlier approximations. The United Nations can be traced back to tribal councils, modern warfare and weapons systems can be traced back to prehistoric people throwing rocks at each other, and complex national and international economic systems have grown out of all the barter and distribution processes used since before the Stone Age.

Culture, asserted White, cannot be explained in terms of humans. Humans have remained a constant element of culture. Culture cannot be explained in terms of environment. Environments have remained consistent while the cultures they have contained have changed dramatically. Culture must be explained in terms of culture; culture is a continuum. All cultural traits grow out of previous cultural traits or situations. Culture of the present was determined by culture of the past, and culture of the future will be determined by the past and the present. Culture makes itself. Although people cannot control the course of culture, they can learn to predict it, and even to make some

adjustments. But understanding culture gives people no more control over it than understanding the ocean gives them control over the tides.

One of the best arguments in favor of cultural control was presented by Opler (1964). Opler argued that culture is not a deterministic entity that uniformly creates its members. People are not helpless, hapless recipients of culture. Rather, they are active shapers of the nature and boundaries of their social processes. "Culture is to be thought of less as a rigid cast than as a plastic border against which men strain" (p. 526). Culture is the work of humanity, it seems to be autonomous only because of our efforts to define and categorize it.

Whether or not culture can be controlled by people is central to the study of organizational culture. If organizational culture cannot be controlled, then there is no point in its examination except as idle scientific curiosity. If culture is determined by previous activities and events, then the researcher has nothing to offer the business practitioner except an explanation of how the current culture evolved. The present study must necessarily operate under the assumption that culture in organizations can be shaped and controlled to some extent.

The Organizational Perspective of Culture

"People who have experienced past success in organizations that are now in trouble usually greet grand announcements for significant change with significant

resistance" (Wilkins & Bristow, 1987, p. 221). According to Wilkins and Bristow (1987), a change agent cannot hope to identify all the cultural conventions that may interfere with change. Most of these latent functions of organizational culture come into awareness when they simply appear during the process of implementation. Change agents must then plan to modify change plans as they uncover new insights about the organization's culture. Any strategic plan that changes the direction of the organization must still begin from where the organization is at the time, and must use the current organizational cultural knowledge and skills.

Rather than attempt to change the roots of the culture, Wilkins and Bristow recommended using the existing culture to achieve the change by considering what motivates and focuses the group. Return to the organization's past to find inspiration and instruction, to identify themes that form the basis of the existing culture, to identify principles that will remain constant no matter what change is implemented, to find examples of current successes, to identify and label eras that indicate directional shifts, and to mourn the loss of the cherished past.

As Tichy (1983) suggested, cultural uncertainties in planning are related to the changes and conflicts in people's value systems, and addressing cultural uncertainties requires determining the influence of beliefs and philosophies on the organizational mission. Allcorn

(1985) suggested that certain elements of culture have work-facilitating or work-inhibiting effects on the work force. Organizational atmosphere can facilitate work if it is relaxed and informal and inhibit work if it is formal and restrictive. Intragroup communication that is spontaneous and flexible will facilitate work while restricted or cliquish communication patterns will not. A clear understanding of the task facilitates work while task ambiguity does not. Constructive conflict and frank, constructive criticism that encourages revision and compromise will facilitate work while ignoring or suppressing conflict or making personal attacks leads to polarized camps that inhibit the work process. When leadership shifts among organizational members and all feel a part of the decision process, the work process is enhanced.

In agreement with Allcorn's conclusions, Moch and Huff (1987) explored the destructive effects of the "blaming ritual" in a large food processing plant in the southern United States. The plant was primarily an assembly line type production pattern with functional division of labor, most of which was unskilled. Moch and Huff observed that the centralized power structure at corporate headquarters left few discretionary resources for the plant manager to use in exchange transactions. In order to meet rigid production schedules under heavy restrictions of hiring and firing, his major asset was his position and use of language

and ritual. The primary ritual observed was the blaming ritual: In ambiguous situations, individuals or groups of individuals were identified as the problem or source of the problem. The blame was usually tied to personal attributes such as laziness or incompetence.

By studying locution, the actual words spoken, Moch and Huff concluded that the plant manager's use of language was specifically designed to emphasize separateness from subordinates and to highlight their inferiority. Many specific rituals were clearly pointless except to define and assert power. Blaming rituals contained an unanswerable logic (a question or situation for which there can be no explanation), surprise (an unpredictable topic and content focus), superficial content, and repetition. The blaming rituals were met with little or no response from the blamee.

Moch and Huff concluded that the blaming ritual provided a number of cultural functions: stability provided by a familiar pattern where the established behavior is the path of least resistance, reinforcement of the boss' intent to maintain power and control, and a restriction of the boss' control from the recipient's point of view. In addition, Moch and Huff concluded that the use of sexual and scatological language had the effect of conveying personal abuse and identifying the individual as the problem rather than the individual's behavior. But the sexual and scatological language also has the effect of keeping things informal and shelters the group from more explicit and

formal control efforts. When a worker is contracted for time rather than product, he or she is open to hierarchical surveillance. Productivity was assumed to be increased through coercive control mechanisms. Language and ritual are specifically designed to maintain control of productivity in the factory.

"There is not much point in attempting to study or change a thing called *culture* if it does not affect what goes on in organizations" (Kilmann, Saxton & Serpa, 1986, p. 88). Therefore, those authors concluded that one must assume that culture does affect organizational behavior and performance, and the direction of the organization. The nature of the impact depends on the strength or pervasiveness of the culture: Is the culture seen the same way by all members of the organization, or differently by different members? Regardless of direction, the culture exerts some level of pressure on its members. According to Kilmann et al., the strength can range from very weak to very strong. A culture has a positive impact on an organization when it moves behavior in the right direction in relation to the plan, when it is widely shared throughout the organization, and when it places a high level of pressure on its members to follow specified guidelines. A culture has a negative impact if it points in the wrong direction, when it is widely shared, and when it places a high pressure on members to conform. When the culture conflicts with the organizational mission, Kilmann et al.

suggest it is better to have a weak culture than a strong counterculture.

Kilmann et al. defined culture as shared philosophies, ideologies, values, assumptions, beliefs, expectations, attitudes, and norms that knit a community together. Culture manifests itself in behavioral norms, assumptions and human nature. Norms are readily measurable and observable; assumptions can only be determined by examination of decisions and decision processes; and human nature is the collection of needs, wants, motives, and desires that define the group. Organizations may have multiple cultures moving in multiple directions with multiple strengths. Kilmann et. al. concluded that managing culture is essential and possible, and that more research is needed to improve understanding and develop methods that increase control of corporate culture.

Echoing the theme that corporate culture can be controlled, Bettinger (1989) advocated a thorough assessment of the organizational culture by senior management. "Without a thorough understanding of the existing culture, the compatibility of strategy cannot be effectively evaluated by management" (p. 38). Bettinger identified certain key cultural components which can be assessed such as the general attitude toward change, the current focus, standards and values, the rituals supporting these values, reward systems, methods of conflict resolution, and levels of commitment to organizational goals.

Most models of organizational culture seem to be the result of observations by consultants and what might be called clinical experience, and are not systematically supported by research. In light of the complexities of organizational behavior and the infancy of this area of conceptual thought, the dearth of research is understandable. But one exception to this generalization is the research conducted by Hofstede (1980). Hofstede studied the values and beliefs of 116,000 IBM employees in 40 different countries and, as a result, developed a model to order societies on four cultural dimensions: power distance, uncertainty avoidance, individualism-collectivism, and masculinity-femininity.

Power distance is the extent to which a culture encourages unequal distribution of power among its members. Cultures can be rated high or low on this continuum. In low power distance cultures, interaction among classes and socioeconomic levels is higher. In high power distance cultures, interaction is lower and tends to be autocratic. Uncertainty avoidance is the extent to which members of the society feel threatened by uncertainty and ambiguity and take steps to avoid uncertainty. In a low uncertainty avoidance culture one would find fewer written rules and procedures, less structure to activities, and higher risk taking. A society low on individualism-collectivism would tend to be loosely structured and self-sustaining (individualistic), while a society high on this variable

would tend to be more cohesive and would place a high value on loyalty and dependance on others (collective). The masculinity-femininity dimension categorizes societies on the extent to which they value masculine traits such as assertiveness, competition, and acquisition of tangible things, or feminine traits such as passivity, cooperation, and emphasis on feelings. In masculine organizations, people believe that the job should offer challenge, opportunity for gain, and advancement. In feminine organizations, people feel that the job should offer good working conditions, security, and the opportunity for open expression and personal growth. Masculine organizations use rational or political methods to solve problems, while feminine organizations use intuitive methods.

Hofstede determined that certain countries tended to produce organizational members with similar cultural orientations that may be assumed to be the result of the nesting culture rather than the organizational culture. For example, IBM employees from France tended to express high power distance, high uncertainty avoidance, medium to high individualism, and medium masculinity, while IBM employees from Switzerland tended to express low power distance, medium to high uncertainty avoidance, medium individualism, and medium to high masculinity. Hofstede developed eight clusters into which most of the countries in the study fit. The only single country in a cluster was Japan, which was medium power distance, high uncertainty avoidance, medium

individualism, and high masculinity. As a result of his research, Hofstede cautioned that an organizational culture can only be a subculture of the larger society, and should be examined in that context.

Using Hofstede's paradigm, Jackofsky, Slocum, and McQuaid (1988) analyzed the relationships between cultural values and selected CEO roles in five different countries: Sweden, West Germany, Taiwan, France, and Japan. Characterizing their conclusions as tentative because of the difficulty of separating the behavior of the CEO from the behavior of the organization, Jackofsky et al. found that each culture embodies distinctive attributes and that these attributes are manifested in the CEO's behavior. Intangible factors such as personality, presence, ability to communicate, and physical appearance all contribute to the difficulty of the analysis. The role of the CEO is critical to the interpretation of national and international values within the corporate culture, and the complexity of the CEO's role only serves to discourage direct research.

The findings of Jackofsky et al. bring to the fore the question of the role of leadership as an element of organizational culture. Several authors (Bass, 1985; Bennis, 1969; Bettinger, 1989; Dalton, 1979; Deal & Kennedy, 1982; Enz, 1986; Graves, 1986; Hauserman, 1987; Linton, 1936; Opler, 1964; Schein, 1986; Tichy & Ulrich, 1984; Wilkens & Bristow, 1987) have stressed the importance of heroism in culture. The cultural component of heroism, for

Deal and Kennedy (1982), was a pivotal and necessary component of leadership. Heroes are central to any corporate culture because they are symbolic figures who demonstrate that ideal behavior and success are attainable. Heroes defy order in the pursuit of a vision. Although Deal and Kennedy felt that some heroes are "born" into the role, they suggested that organizations with strong cultures create their own situational heroes. Companies that promote people who embody fad management practices instead of those who embody key organizational values wind up with weak cultures. Strong cultures, according to Deal and Kennedy, create heroic positions and develop certain types of individuals for those heroic roles. Heroes make success a human possibility, provide inspiring role models, symbolize the values of the company to the outside world, preserve what makes the company special, set a standard of performance, and motivate employees. Bass (1985) proposed a similar idea: Transformational leaders are quality of life managers in that they create and maintain the culture of the organization. If leaders are concerned with the quality of life, and if they plan and implement change, then the change must promote quality of life in terms of the organizational culture.

Most philosophies of administration are founded in rationalistic positivism and tend to avoid quality of life or value issues that are central to management functions (Hodgkinson, 1983). The very foundation of administration

is decision making, and decision making is based on beliefs about good vs. bad, right vs. wrong, cost vs. benefit, and so on. Meanings that people create are inherent in their philosophy: "Philosophy involves a set of beliefs about how the world is structured, and administrators, knowingly or not, put those beliefs into practice" (Foster, 1986a, p. 19).

Even though there seems to be a consensus of opinion on the importance of philosophy, values, and beliefs to an understanding of organizational culture, there is some disagreement on the definition of culture, and, as noted above, definitions that presume to provide practical guidance tend to be inadequate for research. Smircich (1983) has suggested that there are at least five different perspectives of organizational culture:

1. Classical management theory perceives culture as an instrument serving biological and psychological needs.

2. Contingency theory views culture as an adaptive, regulatory mechanism which unites individuals into social structures.

3. Cognitive organizational theory sees culture as a system of shared cognitions, a product of the mind which defines rules.

4. Symbolic organizational theory perceives culture as a system of shared symbols and meanings.

5. Transformational organizational theory understands culture as a projection of the mind's universal unconscious infrastructure (pp. 339-358).

Graves (1986) has pointed out that the various perspectives can be characterized as falling into two categories: (a) the anthropological approach which treats culture as a phenomenon in itself, and (b) the psychosocial approach which treats culture as a variable which is capable of manipulation by managers to improve productivity and performance. The psychosocial approach is sometimes referred to as organizational climate.

Graves argued that the phenomenological culture changes slowly and unpredictably over time, while climate can reflect day to day changes. Graves also suggested that the culture of an organization can be used as a bench mark for organizational change. In fact, change is usually justified by an inappropriate culture. Organizational culture can be theoretically seen as a means of providing stable behavior through a system of causal relationships. These relationships apply an incentive for people to commit to the organizational goals, reduce anxiety, and act as an operant conditioner. Graves stated that although there is general agreement that the concept of organizational culture is meaningful, there are no clear definitions of culture or climate.

Tagiuri (1968) defined organizational climate as "a relatively enduring quality of the internal environment of

an organization that (a) is experienced by its members, (b) influences their behavior, and (c) can be described in terms of the values of a particular set of characteristics (or attributes) of the organization" (p. 27). Payne and Pugh (1976) defined climate as "the characteristic behavioral process in a social system at one particular point in time" (p. 1,126). This behavioral process is the result of and is influenced by members' attitudes, values, and beliefs, with the context and structure of the system being more stable than the people.

Graves and the other organizational climate theorists are interested in a definition of culture that is precisely definable and readily measurable. Graves (1986), for example, used the Ghiselli Self-Description Inventory to investigate the culture of four types of companies in England. The inventory was given to managers in training seminars because, Graves reasoned, the personality of the upper management set and manipulated the climate of the organization. But if the organization itself is nothing more than an "accounting practice" used to make meaning from socially constructed reality, as suggested by Burrell and Morgan (1979), then a survey of the personality characteristics of senior managers is likely to fall drastically short of a meaningful representation of the culture. In addition, the distinction between culture and climate may be useful when considering the manifest

functions of management, but does not make sense when considering the latent functions of management.

After conducting his survey, Graves (1986) concluded that organizational culture is something an organization is as opposed to something that it has, that it is possible to distinguish managers in one company from those in another using character traits and needs, and that the notion of organizational culture is linked to the perceptions of managers and may not exist in any objective, measurable form. Changing an organizational culture can take place at three levels: behavior, attitudes, and values. Changing behavior can be accomplished through rearrangement of the physical environment, facilities, and meeting times. Changing attitudes can be accomplished by restructuring broad levels of management to adjust mental set and perceptions of employees. Changing values requires a change of senior managers, and can only be accomplished by new people at the top.

If culture can be considered a benchmark by which managers can assess change, then a concept of culture which provides a suitable framework for the entire organization is needed. Porter, Lawler, and Hackman (1975) defined culture as a set of customs and typical patterns of ways of doing things. "The force, pervasiveness, and nature of such modal beliefs and values vary considerably from organization to organization" (p. 489). Organizational cultural change

attempts fail if the prevailing and dominant norms and values are not taken into account.

Enz (1986) suggested that research based on definitions of culture that stress symbols, stories, and rituals is too fixated on examining cultural artifacts and ignores common values. "Organizations do not operate under simple rules of reasonableness, but often operate as a function of the enduring values shared by organizational participants" (p. 108). Foster (1986a) agreed: "The ability to label coffee breaks as rituals hardly results in a cultural analysis of the organization" (p. 136).

Foster (1986a) defined culture as "the lived and experienced collection of beliefs that are not really amenable to rationalistic intervention by managers" (p. 136). Leaders do not change culture through programs, Foster argued, but through a personification of values and beliefs that facilitate development of the culture that they favor. The notion of manipulating the culture is overly simplified, and cultural understanding of the organization will never be adequate until it begins to include political and structural aspects of the organization and their relation to the larger society.

The operational definition of organizational culture which was used for this study is that offered by Schein (1986), that culture is "a pattern of basic assumptions--invented, discovered, or developed by a given group as it learns to cope with its problems of external

adaptation and internal integration--that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems" (p. 9). Schein agreed with Bass (1985) by stating that "the only thing of real importance that leaders do is to create and manage culture" (p. 2).

The creation and management of culture requires knowledge of the process of learning and unlearning complex beliefs and assumptions. Typical behavior patterns in an organization, according to Schein, could be as much a result of the environment as the culture, and should not be used as the primary basis for defining the culture. Instead, Schein recommended examining the culture on three different levels: (a) artifacts, the visible level of culture; (b) values, the sense of what ought to be as opposed to what is; and (c) basic assumptions, people's relationship to their environment, and the nature of reality, time, space, human activity, and human relationships.

Clearly, the culture of the organization is the keystone to organizational planning and organizational change. An appropriate culture can facilitate successful planning and change while an inappropriate culture can deter both. The culture of the organization specifies how problems are perceived, how strategies are developed to cope with the problems, and how the organization itself responds to its own plans. Yet culture is difficult to define, and

even more difficult to measure. The evaluation of the success of any strategic change must be conducted with respect to cultural context.

An organization's culture is not a clearly defined entity because it is constantly influenced by the nesting social culture. Members of the organization are also members of the society within which the organization operates and, therefore, will reflect social values which may or may not be consistent with organizational values. The relative merit of an employee's behavior within the organization and his or her response to change must be understood not only by the standards of the organization, but within the broader context of social responsibility.

Social Responsibility of Organizations

American society is becoming increasingly less tolerant of corporate crime (Cullen, Maakestad & Cavender, 1987). The current trend in American organizations is to define and manage the normative systems that channel the behavior of organizational members (Weiss, 1986). The organizational culture is the entity that provides the guidelines for ethical behavior at work by standardizing general and pervasive characteristics of the organization which affect a broad range of decisions (Victor & Cullen, 1988).

Schein (1986) suggested that in order to understand behavior within an organization, the underlying assumptions that have developed within the organization must be

considered. Schein also suggested that three levels of culture interact to produce behavior: (a) operational basic assumptions including the nature of the organization's relationship to the environment, (b) the organization's perception of the nature of time and space, and (c) the organization's perception of the nature of human activity and human relationships. These levels are generally invisible and taken for granted. But they lead to values that are tested in the physical environment and by social consensus at some level of awareness, and, in turn, produce the visible artifacts and creations such as technology, art, and the visible and audible behavior patterns of organizations.

Ethics

The study of ethics is concerned with two basic questions: What is the nature of life's greatest good (summum bonum), and what sort of right and good action is required to bring about the good life (Sahakian & Sahakian, 1966)? One's theory of summum bonum is said to be one's ethical philosophy, and one's application of behavior in practice of ethics is said to be one's moral standard. The ethical theory of an individual or group is a fundamental basic assumption upon which all other operational assumptions are based. Normally when discussing organizational ethics, the actual focus is on the behavioral or moral standards. Writers in the field of organizational ethics rarely address the ethical theory behind the

behavioral prescriptions they are discussing because their primary question concerns whose rules organizations should follow. The ethics or theory behind the prescribed behaviors should be examined in order to make sense of the prescriptions. Often the behavioral prescriptions create conflicts because there is more than one ethical theory involved.

For example, Elkins and Callaghan (1981) outlined a social responsibility doctrine within which business forms a social contract with society. Business functions by public consent, and its basic purpose is to serve the needs of society. If business fails in this contract, society is obligated to seek out some other institution to serve its needs. Business is responsible equally to shareholders (owners), customers, labor and employees, all levels of government, suppliers, financiers, special interest groups, and local communities.

The social responsibility model outlined by Elkins and Callaghan is in direct conflict with Friedman's concept of the social responsibility of business. Friedman (1983) suggested that business serves society best by serving its owners and by making profits. Contributing to society may be in direct conflict with conducting business; only people can have responsibilities, an organization is an artificial person and can only have artificial responsibilities. The employee, as a person, has a responsibility to society. But as an employee, responsibility is owed to the owners of the

organization to conduct business according to their wishes. If the organization is owned by the public (i.e. nonprofit), then the responsibility is to society.

Elkins and Callaghan (1981) pointed out that neither the normative economic model nor the social responsibility model are adequate for use by a manager. The economic model is descriptive and prescriptive for structured conditions within markets and organizations that don't exist. The social responsibility doctrine is too vague and presents some serious philosophical questions. In addition to the above criticisms, it should be pointed out that neither model examines or defines a consistent picture of summum bonum, or what the objective is for the organization and society in general. Friedman (1983) suggested that there are two different objectives for organizational behavior, and they conflict. If Friedman's conclusion is valid, then organizations and the society that nests them are in heated conflict with no hope of resolution. Since the conflict has not resulted in the defeat of either side, there must be some rules involved that prevent this from happening.

Ladd (1983) insisted that there are rules involved. Ladd stated that certain facets of the organization ideal are incompatible with the ordinary principles of morality and the resulting dilemma is one source of alienation. Ladd also noted similarities between the language-game of formal organizations and the language-game of other types of games, such as chess and baseball. Challenging the rules of these

established games is inappropriate as is challenging the rules in the organization language-game.

Ladd also argued that decisions or actions of the organization are attributed to the organization and not to the individuals or even the collections of individuals that make up the organizations. The phenomenon of attribution allows people to have two sets of ethical principles: one when they act in behalf of the organization, and one when they act as a member of society. An employee is acting in behalf of the organization when actions are consistent with organizational goals. Ladd gave the example of a naval officer: the officer is not personally responsible for bombarding a village and killing all the people because that is what the navy does, but that same officer is held personally responsible if the ship runs aground. In other words, decisions that are consistent with organizational goals are attributed to the organization, and decisions that are inconsistent with organizational goals are attributed to the individual. Following this reasoning, if an organization's behavior is unethical from society's perspective, the behavior must necessarily be considered consistent with organizational goals if no responsible individual has been identified as the wrongdoer.

What, then, happens to the individual who must assimilate and follow two sets of ethical principles? According to Ladd, the organization cannot assume a genuine moral posture because the organizational repertoire does not

contain concepts like moral obligation, responsibility, and integrity. Rationality in an organization is determined by means and ends, not by ethical principle. An individual must go along with the organization because there is no evidence that individual action can change the system. One has the same feeling about changing organizational behavior as one would have about changing the nature of the army during a war.

Lachs (1978) suggested that psychological distance from deeds renders us ignorant of the conditions of our existence and the outcome of our actions. Lachs used the example of General Yamashita, Commander of Japanese forces in the Philippines during World War II. At the war crimes trial, General Yamashita claimed that he simply ordered his troops to do whatever was necessary to stop the guerrilla activity not realizing his orders would result in legal atrocities. He was not in effective control; without knowing the mental condition of his troops, he could never understand how a professional and innocent order could have been interpreted as a license for murder and torture. Assuming that a person acts as an individual based on what he or she knows, and considering the expected organizational repertoire of soldiers during a war, Yamashita is blameless. After all, managers may not necessarily question the wisdom of organizational direction. Managers are only doing what they have to do because their responsibility is to the organization. If managers did not perform as expected, they

would be removed from their jobs and replaced by someone who would.

The Relationship of Culture and Ethics

LaCroix (1978) listed three cultural myths, paradoxes really, in business that illustrate the cultural crossover and how it manifests itself in the organization's sense of social responsibility: success, work, and self-interest. Success means that the hero succeeds. Yet any consistent winner is detested by everyone else and must be humbled. Even though everyone in an organization may be working toward the same ideal, achieving that ideal can result in ostracism by one's peers. Work builds character and keeps people from mischief. Work is valuable in itself and a person's time is best spent working to produce something of value. If work really is intrinsically valuable, LaCroix asked, then why do so many people complain about work and spend so much effort getting out of it? If producing is satisfying, then why do so many organizations have to implement programs to increase productivity? Self-interest and utility maximization express a person's prime motivation. If utility maximization is so important for the individual, argued LaCroix, then why do we have organizations at all? Do organizations exist for the maximization of an individual's objectives? If the answer is yes, then all individuals in the organization must have the same objectives. Otherwise, it would mean that some

individuals are not working to maximize their own objectives, but rather the objectives of others.

The three cultural myths listed by LaCroix--success, work, and self-interest--are clearly carryovers from the culture that nests the organization. They illustrate how individuals in the organization attempt to explain their ethical posture when there is no organizational posture. The problem of considering organizational culture and its relationship to the organization's sense of social responsibility is confounded by three issues: (a) the organization cannot be held accountable in the same way an individual can be held accountable, (b) the organization is made up of a collection of individuals with differing ethical philosophies, and (c) the organization will present any image necessary to the nesting society to maintain its existence.

To examine the relationship of culture and ethics, the culture must be adequately described to include a concept of underlying foundation, or basic assumptions, and the ethical philosophy of the organization must be determined. The ethical philosophy of an organization consists of the unique manifestation of the philosophies of the individuals that give the organization a behavioral direction regarding its treatment of the nesting society. In order to discuss organizational culture or social responsibility, the organization must be conceived of as an individual with all the accountability of the individual. The problem with this

concept is that the organization may remain the same, but the individuals in the organization change. Incoming individuals, particularly at top management levels, bring in new ethical philosophies. Fortunately, there is some consistency within organizations after individuals have shifted because of the pervasive organizational culture.

The complexity of the problem is not limited to the description of the organization, but must also include the way in which the nesting society, which is also a collection of individuals, views the organization, and the relationship between the two. For example, business ethics conflicts listed by LaCroix (1978) illustrate the complex relationship between the individual as a member of the organization and the individual as a member of society:

1. Complying with superior's requirements when they conflict with one's code of ethics,
2. Job demands infringing on home obligations,
3. Methods employed in competition for advancement,
4. Avoiding or hedging responsibility,
5. Maintaining integrity when it conflicts with being well-liked,
6. Impartial treatment of subordinates because of race, religion, or personal bias,
7. Moral concern that one's job does not fully utilize one's capacities;
8. Condoning poor quality,
9. Knowingly giving less than best performance, and

10. Misrepresentation of the facts to protect organizational interests.

Each of these conflicts exemplifies the dissonance felt by the individual when weighing the moral standards of society and the moral standards of the organization. Understanding this conflict is the key to understanding the relationship of culture and ethics in an organization.

The ethical elements of organizational culture do not include methods of gathering information, conventions or rules that have arbitrary consequences, or organizational decision making that does not have a differential effect on others (Victor & Cullen, 1988). Victor and Cullen (1988) defined the ethical elements of organizational culture as the ethical climate based on the interaction of the type of ethical criterion with the locus of analysis. The ethical criterion could be based in principle, benevolence, or egoism. The locus of analysis could be the individual, the local community, or the cosmopolitan society. The ethical climate refers to how people in the organization decide, for example, whether it is right or wrong to pay kickbacks, but not to information gathering such as determining whether or not kickbacks are expected, or conventional decisions such as whether the kickbacks should be paid in cash or goods.

Victor and Cullen (1988) surveyed 872 employees in four different companies to determine whether or not ethical work climates have organizational bases separate from individual perspectives and evaluations. Victor and Cullen assumed

that (a) organizations and subgroups within organizations develop different institutionalized normative systems, (b) these normative systems are well known to group members and are perceived as a type of work climate, and (c) perceptions of ethical work climate differ from effective evaluations of ethical work climate.

Victor and Cullen tested two hypotheses: First, the variation in perceptions of ethical work climate between groups is greater than the variation for the individuals within groups. And second, perceptions that describe the ethical work climate are not correlated with attitudes that evaluate work climate. Victor and Cullen concluded that there are at least three distinct sources of ethical climate: sociocultural, bureaucratic or structural, and organization specific sources. There are many types of ethical work climates, and the wide range of relationships between the climate types and evaluations of organizational ethics indicates that climate differs from affective responses to organizations. It is possible, argued Victor and Cullen, that ethical climates might affect organizational performance factors, and that ethical climate prescriptions may influence what ethical issues are considered at work and what criteria are used to resolve these issues. The ethical climates identify the decision processes which generate the systematic responses of organizations to ethical dilemmas.

Ackerman (1973) concluded that there are two major deterrents which inhibit integration of social policy into corporate planning: the perception of daily business activities as separate from and unaffected by the corporate social role, and the notion that socially responsible action goals are not cost effective, that is they provide no business return for the cost. Carroll and Hoy (1984) agreed with Ackerman that social policy must be integrated into strategic planning and operationalized into organizational practice.

Carroll and Hoy suggested that corporate social policy must be addressed at two levels in the organization: the macroview and the microview. The macroview is characterized by organizational goals, high level decision making, concept formulation, high risk taking, and long range planning, and concerned with organizational goals, strategic goals, corporate decisions, and the business environment. The microview is characterized by functional goals, day-to-day decision making, operational implementation, lower risk taking, and short range planning, and concerned with functional operation, operating plans, and coordination. Of the four factors of strategic planning specified by Carroll and Hoy (corporate competencies and resources, market opportunities, the personal values and aspirations of the management group, and acknowledged social obligations) only the fourth element is concerned with what managers ought to do as opposed to what they want to do.

Conflicts between social trends and corporate stakeholders are inevitable. Social responsibility, according to Carroll and Hoy, is generally treated as an environmental factor, and social policy is usually one of adaptation. The public good should be a factor in corporate strategy because corporate legitimacy depends on its responsiveness to social responsibility, the potential for government intervention is high in some cases, and developing a responsive policy is good business practice from the standpoint of business success and continued existence. As society changes, social forces influence marketplace decisions, self-protection decisions, and anticipatory decisions at the macrolevel.

Nielsen (1985) classified several types of strategic responses that can emerge when managers are faced with a conflict between personal morality and organizational strategic thrust. The first, and most common, type of response is to avoid thinking about the problem. But the avoidance response is rarely effective because it does nothing to make the problem go away. Other than avoidance, managers can either obey, leave the company, conscientiously object, secretly go outside the organization to the press or government, or negotiate and build a consensus for a change in strategic objectives. All the responses have their advantages and disadvantages, but the response with the greatest potential for success is negotiation and consensus building, which also is the most difficult to implement.

Nielsen suggested that when negotiation and consensus building is implausible, many managers find the most expedient method of affecting change is to go to outside authorities, sometimes called whistleblowing. Hauserman (1987) defended whistleblowing as an appropriate response to affect change because whistleblowers are asserting a basic individual value or sense of value that approaches ideals beyond the value structure of the corporate America. "Whistleblowers need to be protected against employer retaliation" (Hauserman, 1987, p. 75). If we wish the society of the future to be better off, we need to encourage those who would stand for these ideals.

Whistleblowing, according to Hauserman, reestablishes individual conscience and community standards. Community citizenship has been replaced by feelings of corporate citizenship. This change in allegiance fosters unwillingness in individuals to feel responsible for the victimizing or criminal actions of others. The failure to protect a person who does report misconduct is a sanctioning of moral turpitude. Allowing employees to be fired for reporting illegal actions of corporations supports the notion that loyalty to the corporation is more important than loyalty to society and personal moral values.

However, action taken by an individual does not necessarily promote a sense of community. Nielson (1989) speculated that the state of being as an individual can mean the necessity for intervention to end unethical practices by

working against other individuals and groups. Neilson listed twelve different types of intervention strategies that an individual might take, such as whistleblowing, noting that all of them can be effective. However, intervention can have important limitations. According to Nielson, the individual intervening could be wrong about the organization's actions, the individual could damage relationships within the organization to the extent that no action will correct the problem, the organization could be hurt unnecessarily, or the individual could be encouraged to exercise power inappropriately.

Magnet (1986) concluded from interviewing several high status individuals in the financial world that oral transactions can no longer be made because people do not keep their word, that written contracts cannot be trusted because no matter what language is used it is open to interpretation, and that one cannot simply refuse to deal with unethical individuals because one cannot see this element of character. Part of the problem uncovered by Magnet seems to be that employees hop consistently from one company to the next and begin to see themselves as free agents and their role as self-serving. Employees become devoted to their own objectives instead of the company's and therefore feel no obligation to protect the company.

Magnet suggested that not only has loyalty between the employees and the company been weakened, but also between the company and its customers. Customers make no secret of

the fact that they select vendors on an economic basis and not on the basis of long-term relationships. Misconduct on the part of a supplier no longer results in a permanent exclusion of the supplier from business if economic agreements can be reached. The ethic of the past, according to Magnet, was more of a class value belonging to a genteel oligarchy. But today's managers belong to no class or time honored ethical code. The new ethic is based on the making of money. An individual is admired for the amount of money he or she has, and not how that money was obtained. There is no place for people to acquire mainstream values: The schools strive to be inoffensively value-neutral, colleges teach that everything is relative, and television advocates instant gratification. People in our society have been taught that the cause of wrongdoing is the economic or psychological environment of the wrongdoer, and it is right to hire and promote people not because of merit but because of their membership in a group.

Magnet lamented that business ethic is currently a perversion of the free market economic theory: By pursuing their own interest in their own way, people will augment the wealth of the nation and the well-being of society. The strong are presumed to prevail over the weak; the strong can do whatever they want and their success proves they were right in doing it. If one works long hours, one has the right to any amount of money because compensation can never be adequate for losses in terms of social and family life.

This sense of entitlement weakens the conscience and serves to identify the sense of self as a function of possessions. The quest for increased profits and reduced budgets has the effect of lowering behavioral standards and increasing fear and resentment among corporate survivors, and shredding the corporate cultures in which these standards are embedded. Even though business schools teach that managers must prevent the creation of corrupt cultures that encourage misreporting of revenues and expenses and cheating on contracts, the message ends with the tacit assumption that individual employees cannot be held responsible for their actions. The result is pious corporate ethics that do not require any person to be ethical.

Contradicting Magnet's observations to some extent are the findings of Greenberg (1988) that managers are concerned with fairness to their employees. After conducting a survey of 815 managers across the United States, Greenberg concluded not only that looking fair at work was considered to be different than being fair at work, but that managers expressed a significantly greater concern about looking fair than about actually being fair. A followup survey indicated that looking fair did not necessarily mean that unfairness should be hidden. The followup sample identified four methods managers felt would promote the image of fairness: (a) announcing all pay raises and promotions, (b) explaining how pay raises are determined, (c) allowing workers to participate in decisions, and (d) explaining why work

assignments are made. These four methods would indicate that the managers sampled placed a high value on openness and honesty. Greenberg concluded that this tactic increased the managers' power base and influence, and reinforced the managers' identity and self-esteem. Decisions may tend to be designed to indicate fairness to oneself and others.

An appropriate conclusion to this section on social responsibility in business would be a summary of the observations former Defense Secretary David Packard, former Defense Secretary Melvin Laird, and former Assistant Secretary of Defense Robert Moot made during a roundtable discussion on ethics in the defense industry (Packard, Laird, Moot, Bowsher & Conahan, 1988). Packard argued that ethical problems in the defense industry were caused in part by bad practices on the part of the government. Moot agreed with Packard adding that the government changes the ground rules too often, defining formerly acceptable behavior as unacceptable. Packard also suggested that corporate executives frequently failed to give their lower level managers a clear understanding that integrity is more important than financial performance, and Laird agreed that performance incentives have a tendency to corrupt ethical standards.

Packard proposed that there are several possible solutions to the problem. One might be adoption of the Defense Industry Initiative, which identifies six critical elements for effective self-governance by industry: codes

of conduct, employee training, reporting of violations by employees, procedures for voluntary disclosure by contractors, responsibility to the industry, and public accountability. Packard argued that senior managers must become committed to ethical principles not only by acceptance but through enforcement of the intent of the rules throughout the organization. Packard also advocated the encouragement of whistleblowers not only within the contractors, but within government as well.

Leadership and Organizational Change

Historically, interest in leadership has led philosophers and researchers to speculate on what sorts of personality traits distinguish great leaders from others (Stogdill, 1948). Stogdill (1948) considered this approach inadequate because it did not take other important variables into account like interpersonal relationships and environmental variables.

Lewin, Lippitt, and White (1939) were among the first to recognize that leadership could not be defined out of context. Lewin et al. concluded that leadership style created social climates of three different types: authoritarian, democratic, and laissez-faire. But the first significant departures from focus on leader traits were not made until almost ten years later. Hemphill (1949) studied leaders in different settings and concluded that leadership must be defined by group tasks and group structure, and that

personality characteristics of the leader must be deemphasized.

In the early 1960s, interest in leadership tended to focus more on power and authority relationships as well as on other processes (Blau, 1964; Emerson, 1962; Janda, 1960; Raven, 1965). But in the latter 1960s, the focus on the interrelationships between leaders, followers, and situations led to a revisiting of the psychological aspects of leadership (Fiedler, 1967; Hollander, 1964; Steiner, 1964). Fiedler's (1967) assertion that the Least Preferred Coworker (LPC) scale could identify the leader's style again brought the focus of attention to the characteristics of the leader, this time in relation to the situation.

By the end of the decade, enthusiasm for Fiedler's model began to wane. Hollander and Julian (1969) cited limitations of the trends in leadership research to this point. Earlier studies had failed to distinguish the process of leadership from the leader as a person. The relationship between leader and followers was thought by Hollander and Julian to be built over time and to involve exchanges or transactions in which both leaders and followers give things and get things. The personality characteristics of the leader are determined by followers' expectations of the leader's role as well their own levels of satisfaction. It is the perception of the followers, asserted Hollander and Julian, that determine the value of the leader's traits, not the measurable personality

characteristics of the leader. In addition, Hollander and Julian concluded that leadership traits do not generalize over situations and that leadership effectiveness must be evaluated in relation to the group's achievement of desired outputs.

In the early 1970s, House (1971) attempted to incorporate situational variables, aspects of personality, and subordinate perception into a theory of leadership he called the path-goal theory. The path-goal theory states that effective leaders (a) recognize and/or arouse subordinates' needs for outcomes over which the leader has some control, (b) increase personal payoffs to subordinates for work goal attainment, (c) make the path to these payoffs easier by directing the subordinates' work, (d) help subordinates clarify expectations, (e) reduce barriers to subordinates' goals, and (f) increase opportunities for personal satisfaction contingent on effective performance.

The path-goal theory was later revised to include environmental variables and individual difference variables (House & Dessler, 1974). House considered these six functions of a leader, which he referred to as strategic functions, to be complimentary to the subordinates. The six functions were supposed to increase subordinate motivation necessary for effective performance by providing coaching, guidance, support, and rewards not normally available in the environment. The original path-goal theory states that subordinate motivation is increased to the extent that the

leader fulfills these strategic functions. The revised theory suggests that the required behavior of the leader is determined by the situation in which the leader operates, which is determined by environmental variables and personality characteristics of the subordinates. Environmental variables, in context of the theory, are determined by the subordinates through attribution of control and level of value.

Although House and Dessler found support for the path-goal theory, other researchers indicated that the model did not account for all the relevant variables necessary for an adequate explanation of the leadership process (Barker, 1976; Downey, Sheridan & Slocum, 1975; Sims & Szilagy, 1975; Stinson & Johnson, 1975). The primary criticisms were that the model focused on supervisory positions where leadership is defined as position power, and the model did not generalize to different types of supervisory positions.

The first major departure from the management trends in leadership studies was a lengthy musing on a general theory of political leadership by Burns (1978). Burns suggested there was a crisis of leadership: the mediocrity and irresponsibility of those in power. Regardless of the research on leadership and the detailed investigations of the lives and personalities of political and business leaders, little if anything is known about leadership. The failure of leadership study, according to Burns, was the failure to combine leadership and followership roles

conceptually. Processes of leadership are part of conflict and power dynamics. Leadership is nothing without collective purpose, and the effectiveness of leaders must be judged by actual social change measured by intent and by satisfaction of wants, needs, and expectations of followers. But the characteristic that set the Burnsian notion of leadership apart from the previous definitions was the emphasis on moral leadership: Leaders are different from mere powerholders. Leadership elevates both leaders and followers to higher levels of morality by their taking responsibility for commitments.

Burns specified two different types of leadership: transactional leadership, and transformational leadership. Transactional leadership is the brokerage of power and resources. Transactional leadership differs from management in that the transactional leader "takes the initiative in making contact with others for the purpose of an exchange of valued things" (p. 19). Burns's concept of transactional leadership is akin to the path-goal theory of leadership where the leader is understood to arouse and satisfy followers' needs for payoffs.

Transformational leadership is a concept inspired to some extent by the historic emphasis on charismatic traits of the leader, but differs from traditional notions of leadership in its involvement of the followers in the leadership process. Transforming leadership occurs "when one or more persons engage with others in such a way that

leaders and followers raise one another to higher levels of motivation and morality. Their purposes . . . become fused. Power bases are linked . . . as mutual support for common purpose" (p. 20). Burns saw transformational leadership as collective, dissensual, causative, morally purposeful, and elevating. Transformational leadership is concerned with end values such as liberty, justice, and equality. Leadership must be understood as based in ethics, otherwise it is "reduced to management" (p. 389).

The movement that Burns started took two basic directions. The first direction is essentially the same old direction with a new language. Management oriented leadership theorists borrowed Burns's conceptual descriptions but retained the same old assumptions about leadership: (a) that leadership can be expressed as criteria for effective management (Levinson, 1980); (b) that strategic change is wholly dependent on the CEO's behavior (Hosmer, 1984; Levinson & Rosenthal, 1984; Paulson, 1984); (c) that leaders are responsible for choosing the "right" kind of leadership and corporate lifestyle (Tichy & Ulrich, 1984); (d) that the essence of leadership is the creation of incremental change in the organization (Nielson, 1989); and (e) that leadership is excellent management, the excellence of which is determined by outcome (Kanter, 1983b; Kotter, 1988; Peters & Waterman, 1982; Tichy & Devanna, 1988). But the inadequacy of this direction is expressed even by some of its proponents (Bass, 1981; Bennis & Nanus, 1985).

The second direction started by Burns is more philosophical and integral than the management performance approach. Certainly decision making is central to administration, but decisions are based on values: good and bad, right and wrong, benefit and cost, efficiency and effectiveness (Hodgkinson, 1983). "Values do not exist in the world. They are utterly phenomenological, subjective, facts of inner and personal experience" (Hodgkinson, 1983, p. 31). Hodgkinson (1983) argued that since values act as determinants of behavior, and motivation is a key to organizational performance, leadership cannot be understood except as a function of value issues. And the rationalistic positivism that pervades traditional leadership studies is inadequate because it avoids value issues.

Foster (1986b) argued that the management approach to understanding leadership has failed to produce consistent evidence or minimal clarity of the concept. The current paradigm of leadership operates under several false assumptions listed by Foster: (a) that leaders and followers operate within an uncontested and real social structure, (b) that a major function of hierarchical leadership is the improvement of productivity within that structure, (c) that continual refinement of instruments will facilitate more complete understanding of leadership, and (d) that an empirically justified model of leadership can ultimately be developed. Foster suggested that "leadership is a construct which must be dismantled and rebuilt" (p. 3).

"The theories of leadership which have dominated social science can be dismissed largely on the basis of their non-reflective quality and their inclination to be substitutes for theories of management" (Foster, 1986b, p. 10).

Rost (1988) agreed, suggesting that "traditional leadership scholars and the theories they have developed have been concerned with the peripheries of leadership: traits, personality characteristics, born or made issues, greatness, group facilitation, goal attainment, effectiveness, contingencies, situations, goodness, style, and above all the management of organizations--public and private" (p. 1). Rost continued, arguing that emphasizing the peripheral elements of leadership allows practitioners to grasp something tangible: Followers see leaders taking charge and feel good about following, society experiences a collective sense of greatness and accomplishment, and civilization is given the means to perpetuate its cultural values. The pursuit of leadership within a logical positivist framework provides scholars with scientific comfort even if it provides nothing meaningful toward the understanding of leadership.

Rost contended that scholars have focused on the content of leadership: what leaders need to know about leading. Leadership scholars should be addressing the process of leadership: the relationship between leaders and followers. Rost criticized Burns for failing "to develop a

consistent conceptual framework that clearly (1) distinguishes leadership from management, (2) develops a case for transactional leadership being leadership, and (3) defines the noncoercive nature of leadership" (p. 8).

What, then, are the implications of this second, radical movement in leadership study? Adams (1986) suggested that transforming leadership is a state of consciousness rather than a personality trait or set of skills. Foster (1986b) argued that leadership is a symbolic force; it identifies action which yields social change and improvement. Even though the psychological approach normally identifies leadership as a property of personality or position, Foster contended that leadership is a temporal property of the actor in the process of acting and resides neither in the personality nor the situation. Foster (1986b) argued that leadership is a transient phenomenon that may reside equally well in different players at different times. and later (Foster, 1989) added that leadership is a real phenomenon because it does make a difference and the world would be different without it.

After reviewing the leadership definitions of Bennis (1983), Burns (1978), Selznick (1957), and Tucker (1981), Foster (1986b) identified several commonalties: (1) Leadership is an interactive process that is not possessed by the individual identified as the leader, (2) the leadership process is largely political in nature because it justifies the mores of a community and the allocation of its

resources, (3) the political aspects of leadership include negotiations, conflict management, interest groups, and coalitions, (4) leaders and followers exist in political tension, (5) symbolism is important in leadership, and (6) leadership assesses and reforms social and organizational structures. Foster noted that even though these four theories are an advance over traditional functional approaches because they attempt to account for political and social action, their definitions of leadership are implicitly hierarchical and characterize leadership as a property possessed by some individual. Leadership is treated as a volunteeristic trait, where one can choose to exert leadership.

Foster (1989) characterized leadership as a process of tapping into mainstream consciousness and changing it through dialectic relationships, that is the exchanging of roles between leaders and followers; leadership is a communal relationship. Foster offered four criteria for distinguishing leadership: (1) Leaders must be critical in the sense that they reflect critically on existing social structures and common understandings, (2) leaders must be transformative in the sense that they must be oriented toward social change without necessarily having to change the social structure, (3) leaders must be educative in the sense that they must have a vision of the intended alterations, and (4) leaders must be ethical in that they must be self-critical and self-clarifying. Rost (1988) also

offered four criteria that he considered to be the essential elements of leadership: (1) Leadership is "a relationship based on influence, (2) leaders and followers develop that relationship, (3) they intend real changes, and (4) they have mutual purposes" (p. 51).

Of interest to the present study is Rost's discussion of the role of change as an essential element of leadership. Rost contended that actual change is not necessary for leadership to have occurred; the intention of change is sufficient. Once changes have been completed, there is no longer any leadership process. But the impact of change in the leadership process cannot be measured by outcomes. Successful outcomes do not mean that leadership has occurred, and unsuccessful outcomes do not mean that leadership has not occurred. Failed changes can be a part of the leadership process. The pursuit of goals and the attainment of objectives are management functions, not leadership. Leadership, according to Rost, is based on influencing relationships, intended changes, and mutual purposes.

Summary

Organizational planning and change is a complex process. Strategic planning objectives and the resulting implementations are directly related to the organization's perception of its mission and its manifestation in organizational policy, strategy, and activities. Planning

cannot be assumed to be a rational process despite all the rational tools used in the planning process. Rather, planning is an incremental and constantly readjusted process that includes technological, political, and social implications.

Organizations create strategies within the context of the environment, and then match the process to the content. Of critical importance to the planning process is the human element, both in terms of organizational culture and human resources. The human element affects both the process of planning and the outcome. No plan will work if the human resources are unavailable or inappropriate. And once the humans who will carry out the plan are in place, the nature of their interaction will determine the nature and interpretation of the outcome.

Organizational culture is a key determinant of planning success and is rooted in the values and beliefs of top managers. The selection and placement of individuals within the organization, the tasks they are assigned, and the way in which activities are rewarded are all linked to the value system of those at the top. Culturally, planning relieves anxiety about the future and about control over the present, and the planning process provides a cultural framework for organizational learning and change.

Essentially, the present study is concerned with the process of change on two different levels. To evaluate the organization within its own context, the traditional linear

management theories must be used. Examining the effectiveness of the organization and the changes as they were planned and implemented in the board room makes no sense if it does not relate performance to rational organizational structures. However, understanding the change process is another matter. As suggested by Rost (1988), the change does not have to be successful in the traditional linear sense to be meaningful within a leadership context. The management perspective of change must necessarily provide positive evidence of change toward goals and objectives; the leadership perspective of change is not concerned with outcomes.

Asking the question "has change occurred in the organization?" is superfluous in the literal sense. Of course change has occurred. If nothing else, there has been turnover in the organization. The question from a traditional perspective is concerned with the outcomes of the changes and whether or not they are consistent with the plan. The question from a leadership perspective is concerned with whether or not leadership was involved in the changes, regardless of outcome. In the present study, the question was addressed from both the traditional perspective and the leadership perspective.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Introduction

The purpose of this study is to determine how persons in leading positions can realistically expect to plan and implement a significant, planned organizational change such as that envisioned by the Ethics Program of General Dynamics. The purpose was accomplished through an evaluation of the effectiveness of the Ethics Program as a case example of intended, significant organizational change.

Normal scientific methodology would require the researcher to isolate the Ethics Program for evaluation. This positivistic approach would eliminate the most important contextual relationships that govern both the senior managers' intentions and the employees' expectations of the program. It would be a grave mistake, in this case, to separate the Ethics Program conceptually from other human resources elements of the strategic plan. Within the company, the Ethics Program had come to symbolize all human resources programs as the central vehicle for strategic human resources objectives.

The evaluation included an examination of the planning process that resulted in the implementation of the Ethics Program as a vehicle for strategic change, an evaluation of the program itself, related programs, their successes and their failures, and an assessment of the impact of the program on the culture of the organization. Three different but related approaches were used to formulate conclusions in this study: (a) the case study approach, (b) the survey approach, and (c) the program evaluation approach.

The Case Study Approach

Yin (1984) defined a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidences are used" (p. 23). Yin felt that, in general, case studies are preferred when "how" or "why" research questions are asked, when the researcher has little or no control over the situation or events, and when the focus is on a contemporary phenomenon within some real-life context.

The current study can be characterized as a case study even though other approaches were incorporated into the methodology. The case example is the Electronics Division of General Dynamics Corporation and the case study is concerned with how the Ethics Program and related programs were implemented in the division and what the effects of the program were.

The greatest value of a case study over an experimental design is its flexibility for evaluating possible alternative configurations of factors in prediction (Labovitz & Hagedorn, 1971; Leedy, 1980; Ronan & Prien, 1971; Tripodi, Fellin, & Epstein, 1978). Case studies generally use field research techniques, common in everyday life, which try to make sense out of an on-going process that cannot be predicted in advance (Babbie, 1979; Tripodi et al., 1978). Case studies are useful where it is difficult to specify objectives and programmatic means for selecting those objectives (Tripodi et al., 1978). Information from a case study may also be used for evaluating programs with respect to the nature and quality of the actions of program agents, internal and external.

The present study required extensive use of field techniques to examine and interpret on-going processes. Because organizational processes are continuous, there is no clear definition of what constitutes a change, when that change can be said to have occurred, and what were the probable causes of the change.

Case studies fall into three categories and can be used in a variety of settings. The three categories are explanatory, exploratory, and descriptive case studies, and they can be used in policy and political science research, social science research, administrative planning research, or organizational and management research (Labovitz & Hagedorn, 1971; Yin, 1984). The present study was designed

to describe the process of change and support speculation on probable causes and potential controls. The case study method was used to evaluate not merely static combinations, but dynamic processes involved in shifting structural configurations.

The purpose of a case study is to describe a unit of measure rather than to test a hypothesis (Labovitz & Hagedorn, 1971). The case study method lies midway between the descriptive survey method and the experimental method (Leedy, 1980). The case study is low on control compared to the experimental method and low on representation compared to the survey method, but the advantage of using the case study method is the richness of its descriptive elements. In the present case, the study was designed to explain a particular organizational phenomenon within its organizational context: how a specific organizational change was planned and implemented at General Dynamics, Electronics Division.

Even though I have been a participant/observer in the case, I have had little control over the significant events. Still, an explanation of the process of planning and change at Electronics Division can provide a more holistic and meaningful theoretical proposition than a carefully controlled experiment that excludes many of the most important contextual relationships.

The Survey Approach

There are three devices for direct questioning of respondents that are versatile and useful in almost any social topic, and which can be used to extract useful information in one session (Labovitz & Hagedorn, 1971). The three devices are (a) questionnaires, (b) schedules, and (c) guided interviews.

Questionnaires can be used over large geographic areas and for large populations. The major disadvantages are (a) respondents must be able to read and write, (b) there is a high degree of self-selection, (c) questions must be restricted in length and scope, and (d) there is a lack of depth or ability to probe for meaning.

Both schedules and interview guides are comprised of a set of items or questions that are asked verbally. The disadvantage is that an interviewer must be present to give questions and receive responses. A schedule is a questionnaire that is read to the respondent. More meaning may be extracted from the interview, but the sample must be smaller.

An interview guide is a loosely structured schedule. It lists topics to cover in the interview, but does not list specific questions. The interview guide provides maximum flexibility in extracting meaning, particularly in those areas where little is known.

These three techniques have six potential problems:
(a) sensitive subjects who respond differently because of

the presence of the interviewer or simply because they are being questioned, which means that results cannot be inferred to a population, (b) faulty memory of subjects, (c) the response rate is always less than 100% leading to an overall biased response, (d) the tendency of the questions to tap opinions, attitudes, or perceived behavior and not the actual behavior in a situation, (e) some respondents are unqualified to provide certain data, and (f) invalid responses as a result of lying or misrepresentation. These problems can be overcome to some extent by using other types of observations and restricting the use of survey methods to appropriate techniques.

The survey method is applicable to many types of problems in many fields. Surveys depend on direct contact with people, but they are inexpensive and relatively easy to administer. The adequacy of a survey depends on the adequacy of the sample, and the geographic area and the population must be well defined. Gender, socioeconomic class, occupation, ethnic background, and common experience can be used to define the sample. Festinger and Katz (1953) specified the various types of data that may be extracted using the survey method: demographic, environmental, behavioral, and data which show the level of information, attitudes, opinions, motives, and expectations of respondents. The forms of analysis for these data can include the comparison of different parts of the sample,

linking behavior and attitude, analyzing motivational forces, and prediction.

The present study relied to a large extent on survey data. There was a comprehensive survey of employees conducted by the company in 1986 (hereafter referred to as the 1986 Survey of Employees). This survey was used as a baseline to compare with the results of smaller surveys conducted in 1983, 1988, and 1989 by the researcher.

Hendrick and Jones (1972) suggested there are a number of attitude factors that influence the outcome of a survey, some of which may be controlled and some of which may not. For example, surveys are developed under the assumption that people do not work for years to become unhappy. Yet some behavioral patterns indicate that people do not make the choices that would logically lead to what they specify as happiness. Respondents answer items that attack their beliefs in different ways depending on the level of forewarning. For this reason, survey data were compared with other sorts of data in the present study.

Using data from the 1986 Survey of Employees in the study necessarily required a secondary analysis of the results. Babbie (1979) suggested there are advantages and disadvantages for secondary analysis of survey data collected by another individual. Secondary analysis primarily saves time and costs in data collection, but the disadvantages to secondary analysis have to do with validity. The researcher must determine the extent to which

the purposes of the original survey meet his or her own needs. Original items may come close to asking what the researcher wants to know, but may not provide the appropriate scope or context to meet specified objectives. This situation usually leaves some question unanswered or with incomplete answers. Secondary analysis should be restricted to special purposes such as those used in connection with case studies. The present study, as much as possible, used followup surveys designed to be similar to the initial survey. The emphasis was more on the potential changes reflected by the surveys than on the specific information gathered, although the nature of the information was considered important.

Leedy (1980) distinguished between descriptive survey techniques and analytical survey techniques. Descriptive surveys are primarily qualitative and verbal and deal with a situation which demands that observations be the principle means of collecting data. Populations must be carefully defined, carefully chosen, and delimited. Data obtained by the descriptive methods are particularly susceptible to distortion through the introduction of bias into the design. Data collected by descriptive methods must be organized and presented systematically so that valid and accurate conclusions may be reached. Leedy suggested various methods for developing descriptive surveys and limiting design bias.

Analytical survey methods generate quantitative data that can be analyzed by the appropriate statistical tools.

The purpose of using analytical surveys is to probe those data so that certain meanings may be inferred, and the presence of dynamic forces and potential forces may be discerned. These forces may provide clues for further investigation.

Surveys used in the present study were designed to generate qualitative observations of the company's operations and employees' attitudes toward those operations. The initial survey was used to pinpoint organizational problems that required intervention by management. The followup surveys were designed to compare similar sample responses with the initial survey data to determine if the interventions were effective.

Program Evaluation

Most evaluation research is conducted on social, political, and educational programs (Madaus, Scriven, & Stufflebeam, 1983). Therefore some adjustments had to be made to the language and application frequently used in evaluation research models to accommodate a study of a program for organizational change. However, these adjustments should not have changed the basic conceptual framework of the models under consideration.

Rossi and Freeman (1985) defined evaluation research as "the systematic application of social research procedures in assessing the conceptualization and design, implementation, and utility of social intervention programs" (p. 19). The present study is concerned with the evaluation of a program

designed to change the attitudes, behaviors, and values of the employees of General Dynamics. In a sense, the Ethics Program was attempting to change the culture of the organization and, therefore, could be considered very much akin to a social intervention program.

The naturalistic inquiry model of evaluation (Guba & Lincoln, 1985) focuses on the issues and concerns inherent in any social context. Guba and Lincoln (1985) defined a concern as a matter of interest to one or more parties in the society. Concerns are rarely defined and specified although they contribute significantly to actions taken by those who hold the concerns. An issue, on the other hand, is a statement that provides a basis for the presentation of different points of view, or a proposition about which reasonable people might disagree. Issues and concerns are the basic organizers of the evaluation because they provide a pluralistic context for considering merit and worth.

Guba and Lincoln considered evaluation as a process for describing an evaluand and judging its merit and worth. The merit of an evaluand can be considered against a stable and relatively unaffected standard, while worth is determined by comparison of a snapshot of the evaluand with a variable standard. In a pluralistic society, merit is a relatively stable notion of value that is widely understood and accepted even in situations of conflict. Worth is a fluctuating value associated primarily with economic parameters. The importance of merit and worth in evaluation

is fundamentally linked with the communication of information to the audience of interested stakeholders: those who share interests and concerns that are related to the evaluand. Merit and worth are pluralistic phenomena that provide the context for the process of evaluation.

The present case presented a perplexing evaluation problem. Normally, the worth of a company's business plans can be judged by comparing the plan outcomes with the economic standards established by the company's objectives and by the environment. The Ethics Program was an element of the business plan at General Dynamics, but it was more appropriately judged on its merit to society.

Guba and Lincoln suggested there are four steps to a case study: (a) to chronicle, or to develop a register of facts and events; (b) to render, or to depict and characterize; (c) to teach, or to provide with knowledge; and (d) to test, or to prove. The fourth step is, according to Guba and Lincoln, an evaluation and is an integral part of an evaluative case study. In contrast with the other three steps, the final and ultimate product of an evaluation is a judgement. The judgement is based on examination, clarification, and synthesis of the facts, and leads to a naturalistic generalization in contrast with the scientific generalization of the experimental method. To make the judgement effective, the evaluator must constantly interact with the stakeholders in a process of negotiation. It is

this process that provides the proper checks and balances for the evaluation.

Guba and Lincoln specified that the rigor of an evaluation can be demonstrated through credibility, applicability and external validity, and consistency and internal validity. Credibility can be enhanced by collecting data on short notice, addressing experimenter and subject biases, and describing the data gathering techniques. Applicability and external validity can be enhanced by checking facts with sources, exploring self-interest conflicts, and investigating institutional myths. Consistency and internal validity can be enhanced by clarifying information, documenting audit trails, triangulation, and following up on divergent leads.

Research Design

The research questions were answered using corporate documents and surveys, participant observations, surveys conducted by the researcher, media observations, and corroborative observation and analysis by selected members of the organization as triangulated sources of information. A comparative analysis of these data was conducted to develop and support answers to the research questions. The corporate documentation equaled three years worth of data collected from the Ethics Program. These data represented the nature of the complaints registered with the Ethics Program directors within the corporation, and actions taken

as a result of those complaints. An analysis of these data, combined with corroborative analysis, provided sufficient basis for an evaluative judgement of the effect of the program.

In addition to the data gathered by instrumentation, the experiential perspective and the intimate familiarity with the organization that I have as a result of my tenure there have proved to be significant factors in the formulation, analysis, and interpretation of the results. My continuous participation in the organization and its processes has given me the capability of understanding and interpreting motives and values behind statements made by interviewees that may have been missed or interpreted differently by a researcher unfamiliar with the organizational culture and history.

There were some opportunities to compare the implementation of the Ethics Program at Electronics Division with that of other divisions. But the case example had to be limited to Electronics Division because of time and logistic limitations, and because initial examination revealed that the differences between divisions were great enough to potentially confound the results.

Methodology

The study was conducted in three basic phases: (a) the planning process used to develop the Ethics Program was researched and defined, (b) the effects of the program were

examined using surveys and interviews, and (c) a judgement of the effectiveness of the program in achieving its goals was developed. The development of these three phases required examination of the antecedents to the program, program goals, implementation activities, manifest or intended outcomes, actual outcomes, and latent actual outcomes.

The primary unit of analysis was the Electronics Division of General Dynamics. The corporation as a whole could not be examined because it was too large and complex to be represented in one study.

The analysis was carried out in four steps: (a) the planning process and the nature of the intended change were defined, (b) the nature of the program and its objectives were defined, (c) the organizational culture and its changes over the past two years were examined, and (d) the success of the plan and the program was evaluated. The plan was defined by gathering data about the environmental and political pressures affecting the organization and how these pressures resulted in a new management philosophy and revised strategic position. These data came from unclassified company documents, media sources, and interviews. The nature of the ethics program, its implementation, its objectives, its broader goals, and subsequent programs was defined using company documents and interviews. The organizational culture was examined using guidelines and recommendations suggested by Schein (1986)

for the three levels of understanding. Plan and program success was assessed using data gathered in the previous three steps.

Participant and Site Selection

Participants were located in the four sites of General Dynamics, Electronics Division located in the San Diego area. Electronics Division employs an average of about 3,500 people during the time of the study. This accounts for approximately three percent of the company's employees. Participants included myself, the investigator, who has worked for the company for more than ten years, key individuals within the division who had direct knowledge of the planning process and its effects at top levels of the division and in the corporation, and division employees at various levels of the organization.

I was involved in the implementation of the Ethics Program and I conducted training classes for other employees to introduce them to the program and its requirements. For the previous eight years, I had been involved in developing and implementing business plans for production and material control, and I have had access to the key procedural mechanisms that produce action from policy. At the time of the study, I occupied a policy making position for developing and implementing procedures and systems to control United States Government owned property located at the division. I was a member of the Vice President of Material's staff.

Five key individuals, three males and two females, were interviewed to determine the specifics of the planning process and implementation. This group of key individuals will hereafter be referred to as the planning group. By agreement with them, I cannot reveal their names or positions because of possible repercussions. These five individuals, whose longevity with the company ranged from 8 to 37 years, were selected because they were known to the researcher to be cooperative, insightful, straightforward, and they were involved as a result of their positions in the major administrative processes of the division. None of the key participants were aware of the identity of the others.

The impact of the implementation and potential cultural changes was examined by interviewing ten professional employees, five females and five males, and five hourly employees, two females and three males, each with more than three years of service (range = 3-14 years). This group of 15 employees will hereafter be referred to as the cultural group. By agreement with them, I cannot reveal their names or any other information that might result in their possible identification. With the exception of two individuals, the subjects did not know the identity of the other participants (two subjects were interviewed together). The subjects were selected because they were known to me to be insightful, credible, and straightforward. Because an element of risk was involved as a result of their participation, trust--particularly their trust in me--was an essential

criterion of selection. The subjects represented Engineering, Material, Operations, Quality, Finance, Human Resources, and Information Resources departments.

Participation in the 1986 Survey of Employees was voluntary and on-site participants were determined through stratified random sampling localized in each division. All employees not selected to fill out the survey during working hours were mailed a copy to be completed and returned. All General Dynamics employees were given the opportunity to participate. About 70% (61,974) of all General Dynamics employees completed and returned the survey and were included in the analysis. About 70% (1,273) of all Electronics Division employees participated: 952 completed the survey on site, and 321 completed the survey at home and mailed it to the consulting firm. A categorical breakdown of corporate and division respondents is represented in Table 1.

The corporatewide survey was wholly developed, conducted, and analyzed by Sirota and Alpert Associates, Inc., a consulting firm hired by the company specifically for that task (Sirota, 1986). To protect anonymity, no General Dynamics employees were allowed to see the completed questionnaires.

The researcher conducted three surveys that provided comparison data. The first survey was conducted in April, 1983 (hereafter referred to as the April 1983 Survey) within the Manufacturing and Material Control Department of

Table 1

General Dynamics 1986 Survey Respondents

Employee Classification	Sample	
	Corporate	Division
Management	7,193	224
Professional	20,447	565
Management Support	6,563	126
Labor	22,397	322
Unidentified	5,374	36
Total	61,974	1,273

Electronics Division. All department employees were given the opportunity to respond anonymously and 60% (253) did respond. The second survey was conducted in March, 1988 (hereafter referred to as the March 1988 Survey) within the Material Department of Electronic Division. All department employees were given the opportunity to respond anonymously and 16% (50) did respond. The third survey was conducted in June, 1989 (hereafter referred to as the June 1989 Survey) within the Material Department of Electronics Division. All department employees were given the opportunity to respond anonymously and 76% (205) did respond.

A fourth survey used for comparison was conducted in the Engineering Department by Engineering personnel in February, 1989 (hereafter referred to as the February 1989

Engineering Survey). All department personnel were given the opportunity to respond anonymously and 8% of the approximately 900 Engineering employees responded. The exact number of respondents is unknown.

Instrumentation

The 1986 Survey of Employees was designed by the consulting firm of Sirota and Alper Associates hired by the company for that purpose (Sirota, 1986). The consulting firm began by conducting interviews with small groups of employees selected at random in the different divisions about specific employee concerns. Fifty interview sessions were held with a total of 500 employees. The consulting firm also interviewed various union leaders, customers, and other outside consultants. The final survey included 125 basic questions asked of all General Dynamics employees, and 40-50 additional questions designed to address issues specifically related to the employee's division. The Electronics Division version of the survey contained an additional 36 items for a total of 161 items (Appendix A). All questions were multiple choice design with most items containing a space for write-in responses. The purpose of the survey was to gather information about employee issues and concerns so that management and supervisory personnel could take structured action to resolve problems (Sirota, 1989). There was no validity or reliability information reported.

The April 1983 Survey was designed by the researcher for purposes of exploring the issues and concerns regarding the existence and function of the Program Control Department of the Manufacturing and Material Control Department of Electronics Division. The survey was commissioned by the Director of Manufacturing and Material Control to determine the possible need for reorganization. The survey consisted of nine open-ended items (Appendix B) addressing topics that were suggested by the Director. Reliability and validity data were not determined.

The March 1988 Survey was designed by the researcher to determine the issues and concerns employees had about the Material Department of Electronics Division. The survey contained one open-ended item: "What are the top ten problems in GDE in general and in the Material Department specifically?" Reliability and validity data were not determined. Because the March 1988 Survey contained only one item, it does not appear in the Appendices.

The June 1989 Survey was designed by the researcher to compare responses within the Material Department to identical items in the 1986 corporate wide survey. The survey consisted of 14 items, thirteen of which were identical to the original survey (Appendix C). Item number two was a modified version of item number one and did not appear on the original survey. The items to be addressed were selected by collective agreement of the Vice President of Material and his staff because they had indicated

employee concerns on the original survey and were singled out for corrective action. Reliability and validity data were not determined.

The February 1989 Engineering Survey was designed by Engineering Administration personnel to address an action item selected by department management to address concerns identified by the 1989 Survey of Employees. The purpose of the February 1989 Engineering Survey was to examine changes in communication patterns within the Research and Engineering Department of the Electronics Division that may have occurred between 1986 and February, 1989. The survey consisted of 11 multiple choice items (Appendix D). No reliability or validity data were available.

All interviews were conducted from interview guides prepared by the researcher. Two types of interviews were conducted: (a) interviews designed to extract information about specific programs and program results conducted with the key individuals (Appendix E), and (b) general interviews of employees designed to uncover values, beliefs, and basic assumptions under the guidelines recommended by Schein (1986) for assessing organizational cultures (Appendix F).

Data Collection And Analysis

Some existing data were reanalyzed for this study. These data included the results of the corporatewide 1986 Survey of Employees, the results of surveys conducted by the researcher (the April 1983 Survey and the March 1988 Survey), the results of the survey conducted by the

Engineering Department (the February 1989 Engineering Survey), the actions planned and reported upon as a result of the 1986 Survey of Employees, the tabulation of complaints received by the Ethics Program directors, and changes to existing standard practices and departmental procedures.

Original data were gathered from the June 1989 Survey, from interviews with a sample of employees regarding their perceptions of changes in the company and other observations related to the organization's culture, and from interviews with key individuals regarding their analysis of the planning process and the effects of the Ethics Program and its success in achieving its specific objectives and its broader goals.

Interview participants were asked to agree to be interviewed multiple times, depending upon their position in the company and their relative contribution to study objectives. Second interviews were conducted with all respondents regarding cultural assessments but not with any of the key individuals. The second interview explored the validity of summaries, observations, and speculations derived from the first interview and interviews with other respondents.

The specific data gathering steps were as follows:

Phase I - Defined the planning process.

Step 1 - Reviewed corporate documentation.

Step 2 - Structured program interview guides.

Step 3 - Conducted interviews with key personnel.

Phase II - Examined program effects.

Step 1 - Reviewed initial survey data.

Step 2 - Conducted resurvey.

Step 3 - Structured cultural interview guides.

Step 4 - Conducted interviews with selected employees.

Step 5 - Analyzed data.

Step 6 - Reinterviewed.

Phase III - Judged program effectiveness.

Step 1 - Organized and analyzed all data.

Step 2 - Interpreted data.

The nature of the data required comparative and descriptive analysis. Inferential techniques were not necessary, and would not have contributed to any meaningful interpretation of the data.

Human Subjects - Ethical Considerations

Employees were subjected to two types of observation: paper and pencil survey, and interview. Some subjects participated in both types. All surveys were anonymously distributed and received. Interviews revealed two types of information: program information and cultural information. All subjects signed an agreement (Appendix G) which stated the purpose of the research and informed them that their identity would not be revealed. Therefore, the identity of subjects interviewed will be known only to the researcher, and their responses will be grouped to eliminate the

possibility of identification. Subjects at no time were placed in a potentially harmful situation by the process of research.

Conclusion

The design allowed for the accumulation of a large volume of data, and also provided the flexibility for latent insights to emerge. The rigor in the design was supported by the triangulation of a variety of sources of information. The methodology did not impose rigid controls on gathering, analyzing, and, ultimately, interpreting the data. However, my obvious biases, which would ordinarily result from prolonged immersion in the organization's culture, were offset by my ability to comprehend and sort out the understatements, overstatements, parochial attitudes, and symbolic language that may have passed unnoticed by an outsider. Whatever was lost in terms of control was replaced by cultural insight and conceptual flexibility. Insight and flexibility are essential when attempting to extract meaning from complex social processes.

CHAPTER IV

RESULTS

The Planning Process at General Dynamics

The official division policies for developing and reporting division strategic and operating plans are specified in Division Standard Policy SP.07.05.01. This policy states that the Division Planning Department of the Marketing Department is responsible for developing the plans with the assistance of the General Manager's staff and submitting them to corporate headquarters, and that division plans must be reviewed and approved by the General Manager. The plan's contents are considered company private information and are to be handled using standard security procedures. The policy also states that the division strategic plan, which contains the division's long-term objectives, associated risks, and their impact on the division, and the division operating plan, which contains the division's commitment to a level of performance and performance forecast, both should be prepared annually. Division strategic plans and operating plans should be prepared in accordance with Corporate Policies 4-103 and

4-104 respectively which give specific details for preparing and submitting the plans.

Division business plans are distinguished from strategic and operating plans in SP.07.10.07. Business plans are developed for new business opportunities as the need arises. Business plans contain detailed analyses of the new opportunities and are used in the decision-making process. SP.07.10.07 specifies the required sections and suggested subsection topics for the business plan outline. The required sections are a program or product line overview, an assessment of the customer, an assessment of the competition, an assessment of the market, a recommended strategy, a proposed support organization and schedule, investment requirements, technology requirements, key issues, and a plan of action.

According to an internal corporate memo from Herb Rogers, President of General Dynamics, to all division general managers and key corporate and division planning personnel dated 20 March 1989, corporate executives considered the strategic planning process to be an opportunity to identify strategic objectives, to develop long-term alternative actions, and to articulate appropriate strategic responses to the business environment. The memo also stated that the strategic plan consists of a mission statement, a strategic approach, five strategic goals, and operating guidance. In addition, the memo firmly communicated the suggestion to disseminate the corporate

strategic guidance throughout the management structure so that everyone can understand their roles in implementing the intended business direction.

The above mentioned memo was the cover memo for the corporate strategic plan. The memo specified that the purpose of the plan was to initiate discussions and negotiations between division and corporate executives that would culminate in the development of division-specific strategic objectives, and that these objectives would be achievable only when actions were defined and completed.

The plan itself is a company private document and cannot be quoted directly. However, the corporate mission statement as it appeared in the strategic plan was quoted in the division newspaper (Riccitelli, 1989a). The following mission statement was attributed to company president, Herb Rogers in the article:

General Dynamics is dedicated to achieving and maintaining the highest integrity of our products, our people, and our corporation. The foundation of General Dynamics' business will be based on developing and delivering superior world-class, high-technology systems. We will give priority and focus to continuous improvements in the quality of every aspect of operation correspondent to reductions in cost. Our end objective is two fold: first, to meet the needs of our customers; second, to ensure that all our actions are in the best interests of our shareholders. (p. 1)

Another version of the corporate mission statement is available in both editions of the unclassified handbook General Dynamics Standards of Business Ethics and Conduct (Appendix H), the pamphlet used to communicate the specifics of the company's Ethics Program to all employees. The mission statements are identical in both editions, but where the statement appeared on the back cover of the first edition, it was moved to page four of the second edition following the table of contents and the message from the Chairman. The change in position of the mission statement in the second edition appears to reflect the corporate executives' desire to communicate the corporate mission to all employees.

Following the mission statement in the second edition of the ethics handbook (Appendix H) is a statement of key commitments, values, and responsibilities. The five key commitments are to the customers of General Dynamics to bring them the highest quality products for the lowest cost, to the suppliers to be a good customer, to each other as employees to treat one another fairly and with dignity and respect, to shareholders to pursue growth and earnings objectives while keeping ethical standards in mind, and to the communities in which the company operates to act as responsible and responsive corporate citizens. The key values specified in the handbook urge employees to be dedicated and loyal to company and country, law-abiding, honest and trustworthy, responsible and reliable, truthful

and accurate, fair and cooperative, and economical in using company and customer resources. These key commitments and key values communicated the intentions of the corporate executives to utilize the Ethics Program as a central element of strategic human resources planning. By providing this conceptual framework as an introduction to the standards, executives appeared to have intended to communicate to employees that ethical behavior begins with treating each other with dignity and respect. Thus, employees rightly expected the Ethics Program to alter unfair treatment by supervisors and peers, and to be the foundations of good business practices.

Having specified the key commitments and key values, the pamphlet stipulates the responsibilities of the company, supervisors, and individual employees. The company's responsibilities focus on creating and maintaining the Ethics Program, communicating the ethical standards, enforcing those standards, and ensuring that working conditions at all locations are supportive of those standards. Supervisors are responsible for assuring that all new employees are properly trained in the meaning and application of the standards, demonstrating their own commitment to the standards by exemplary behavior, and maintaining an environment that encourages frank and open communication and concern for the standards of conduct. All employees regardless of rank or station are responsible for knowing and understanding the standards of conduct,

upholding associated policies and procedures, seeking help when necessary, being sensitive to potentially unethical or illegal situations, counseling fellow employees, and reporting violations of the standards. Following the definitions of responsibilities, the handbook defines the standards.

The 1989 strategic plan predicted trends in shifting demographics of the workforce, increased involvement of employees in improving productivity, increasing quality and reducing cost, and increased social responsibility of industry. Based on predicted trends, the assessment of the environmental conditions concluded that new approaches to human resources management and work force training were needed. In a section entitled "Operating Guidance," suggestions were made for managers to involve employees and their ideas for improvements, to be sensitive and responsive to the diverse needs of the workforce, to plan and implement flexible human resource programs emphasizing training, to plan good corporate citizenship and conduct business to the highest ethical standards, to maintain a work environment that respects the rights and dignity of employees, to accept the increasing social responsibility expected of corporations operating in communities, and to communicate with employees, shareholders, citizens, and political leaders. Combining these elements into a single section indicated that all of them were aimed at the same general goal. Business practices at General Dynamics have been

characterized as dependent upon a work environment that maintains the basic moral treatment of human beings as members of the community so that they might actively participate in the business process.

The basic elements of the strategic plan had been communicated to employees through company newspapers. An article on corporate level strategic plans (Riccitelli, 1989a), in addition to stating the organization's mission, outlined the major points of the business charter, the company's assessment of the business and market environment, and the company's strategic goals. This article focused on corporate business plans for economic growth, technological growth, and increased productivity but did not cover any of the elements regarding corporate responsibilities, communication, or ethical standards.

Division level strategic objectives were covered in a different article (Riccitelli, 1989b) which also stressed specific economic, sales, technological development, quality, and productivity goals. However, this article devoted one section, entitled "Provide a Fulfilling Workplace for Electronics Division Employees," to a specific division goal to provide resources and training and development opportunities to employees to increase their productivity. Communication of senior executives' desires to increase human resources awareness seemed to be intertwined with their desires to increase ethical awareness.

A similar article (Riccitelli, 1988) outlined the process of developing operating plans and specified the division's approach to implementing certain economic, sales, and performance goals. Performance to goals has been consistently reported in the division newspaper as a summary of the General Manager's annual State-of-the-Division address to the management club in January, and in occasional articles covering quarterly performance. The Ethics Program has been subjected to the same type of management controls as other human resources programs. For example, performance to Ethics Program goals was outlined in an article (Andrews, 1988) and in a specific report (General Dynamics, 1988).

Other strategic plans were communicated to employees. An explanation of a strategic organizational restructuring in the division (to focused business units) was offered in an article by Dong (1989). This particular planned organizational change was cited as a source of concern by 11 of the 15 employees interviewed by the researcher.

The Ethics Program at General Dynamics

The Ethics Program at General Dynamics was created in June, 1985 by Stanley Pace, then Vice Chairman of the Board, as one of five elements in the corporation's Zero Defect Administration Program. The specific objective of the Ethics Program was to "put the Standards of Business Ethics and Conduct into practice" (General Dynamics Corporation, 1988, p. 6). A broader goal was implied by Kent

Druyvesteyn, Staff Vice President-Ethics Program: "The purpose of the General Dynamics Ethics Program is to help employees in their everyday business activity, not to catch them in wrongdoing" (Andrews, 1988, p. 3).

Pace developed a four phase plan to increase employee awareness of the rules, to increase commitment to standards of behavior, and to increase knowledge regarding the resolution of ethical dilemmas in the workplace ("Ethics Training," 1986).

Phase one of the plan was to have the division general managers meet in early 1986 at corporate headquarters to discuss the strategies for developing and implementing the program. When the general managers had been briefed, one-day awareness workshops were conducted for the general managers' staff members.

Phase two involved hiring or appointing division ethics directors and setting up lines of communication for employees to use when seeking advice or reporting wrongdoing. A program director was hired at the corporate office, Ethics Program Directors were appointed at each division, and an advisory group was convened at corporate headquarters in August, 1986 to review the proposed standards and to create long-term plans for implementing and maintaining the Ethics Program ("Five Ethics," 1986). There were a total of 34 ethics directors, nine of whom were devoted to the task full time in the nine major divisions (General Dynamics Corporation, 1988). Primary modes of

communication were telephone calls and personal visits. A toll free "hotline" was established for the entire corporation to use, and each division set up a special local number that was answered directly by the Division Ethics Director or was answered by a recording device if the director were unavailable. The Division Ethics Directors maintained an open-door policy so that they would devote immediate and confidential attention to anyone who visited their private offices.

Phase three required each division staff to select an adequate number of internal trainers for the division based on division population (there were 17 trainers in Electronics Division). The division trainers attended a two-day offsite session to prepare themselves to train all other division employees.

In phase four, all other employees in the corporation (approximately 103,000) participated in a training course in which they were introduced to the Standards of Business Ethics and Conduct (hereafter referred to as Standards). The training sessions were four hours long for salaried, professional employees, and two hours long for all other employees. In addition to covering the rules, the training session was designed to heighten employees' awareness of common ethical dilemmas and how to deal with them. The training sessions were discussion type seminars which were facilitated by the in house trainers. All new employees

receive a review of the Standards as a part of their orientation.

The first edition of the Standards was published and distributed in August 1985 (General Dynamics Corporation, 1988). In that same year, the Board of Directors established the Committee on Corporate Responsibility to review the effectiveness of the Ethics Program and to receive reports on its progress. In addition to the Committee, the Chairman and Chief Executive Officer created the Corporate Ethics Steering Group to provide advice on the implementation of the program. The Steering Group reviewed policies, procedures, and practices and made recommendations for improvements. The Steering Group was composed of corporate functional heads including Legal, Human Resources, Internal Audit, Contracts and Pricing, International Offset, and Controller.

The Standards were revised and redistributed in October 1987 (General Dynamics Corporation, 1988). All corporation employees received a one hour training session at that time conducted by a new set of in house trainers to familiarize them with the changes in the second edition of the Standards. At both the initial training session in 1986 and the update session in 1987, employees were required to sign a card stating that they had received and read a copy of the Standards and understood that the Standards represent the policies of General Dynamics Corporation. The second edition of the Standards included two new standards: one on

safety, and one on the proper use of the Ethics Program. In addition to changing the Standards to strengthen and clarify the meaning of the rules, the second edition of the Standards was published to emphasize the importance of the program (General Dynamics Corporation, 1988). The process of distribution was designed to increase awareness of the Standards and to stimulate commitment to the program.

On April 30, 1986, the Chairman, Stanley Pace, signed Corporate Policy and Procedure (CPP) 23-103, "Investigations and Sanctions - Business Ethics and Conduct," that specified the policy and procedures for investigating alleged violations of the Standards and the appropriate sanctions to be applied to violators. Electronics Division created two Standard Policies to further clarify CPP 23-103. The first, SP.02.04.01, "Standards of Business Ethics and Conduct," was authorized on July 14, 1986 by the Division General Manager to establish division policies on business ethics and conduct. This policy specified who had what responsibilities to investigate and resolve ethical issues, and that the identity of whistleblowers will be protected. The second, SP.02.04.02, "Conflicts of Interest - Giving and Receiving Items of Value," established division policy regarding the exchanges of items of value between employees and current or potential customers and suppliers. This policy covered giving and accepting items of value including meals, entertainment, and promotional gifts, misrepresenting

the value of items on official documents, and special cases or exceptions.

In addition to the training, the scope and gravity of the Ethics Program was communicated to employees in various articles in company newspapers. The first of these were announcements in division newsletters about the initial Corporate Ethics Awareness Training Program ("Ethics Training," 1986), and reminders about the local channels for communication (Reynante, 1988). The corporate monthly newspaper featured articles announcing the development of the Ethics Program ("Five Ethics," 1986), on the disciplinary measures taken (Andrews, 1988), on lines of communication ("Ethics Program," 1989), and on how to use the lines of communication ("Tips Given," 1989). The latter article indicated that there was some confusion among employees as to the purpose of the Ethics Program. This article specified that the ethics hotline should be used for questions and concerns regarding the standards, and the ombudsman hotline should be used for questions and concerns regarding compensation, discrimination, discipline, harassment, and so forth.

In 1986, various Ethics Program representatives throughout the corporation received a total of 3,646 communications. In 1987, the total number of communications rose to 5,482. However, in 1988 the total number of communications fell slightly to 5,379. Table 2 illustrates a breakdown of contacts by the specific categories specified

Table 2

Ethics Program Contacts by Standard Category

Standard	Year		
	1987	1988	1989
Gifts, Gratuities, & Entertainment	677	450	392
Inside Information	15	14	19
Outside Interests	128	145	156
Former Government Employees	43	52	66
Selling/Marketing	20	26	16
Antitrust	1	0	0
Pricing, Billing, & Contracting	59	71	38
Time Card Reporting	533	668	610
Suppliers & Consultants	257	416	540
Quality & Testing	96	133	145
Expense Reports	128	144	107
Company & Customer Resources	202	508	784
Security	0	70	87
Political Contributions	0	12	10
Environmental Actions	0	30	37
Safety & Health	-	5	113
International Business	0	10	12
Proper Use of the Ethics Pgm.	-	3	58
Employee Relationships & Other	1,487	2,725	2,189
Total	3,646	5,428	5,379

in the Standards. It is interesting to note that nearly half the contacts were related to human resources issues, labeled as "employee relationships and other."

The data in Table 2 represent first time contacts for each case. Followup contacts in any particular case were not counted. Demographic data and other identifying information was not compiled (General Dynamics Corporation, 1988). Approximately half of the communications were received on hotlines. Approximately one third of the contacts raised concerns or allegations; the remaining two thirds were inquiries.

Investigations of allegations were specified by CPP 23-103 and followed three phases: (1) initial screening, (2) preliminary review, and (3) formal investigation. Allegations received through the Ethics Program in 1987 resulted in an imposition of 205 sanctions, including 29 suspensions and 27 discharges.

After two years of experience with the Ethics Program, General Dynamics Corporation (1988) specified the following "lessons learned:"

1. The average person has a strong personal sense of integrity and guards his or her reputation jealously. This sense is the strength of an ethics program.

2. People often respond emotionally to the word "ethics." Reactions are often negative, defensive, or cynical. The word must be used carefully in building an ethics program.

3. The commitment of all persons in positions of leadership is an absolute condition for establishing an ethics program. But the commitment of all employees at all levels is absolutely necessary to fully implement and maintain the program.

4. An ethics program is best integrated into the existing structure of the organization. It should not stand alone or exist as a mere appendage. A large independent staff and budget are unnecessary and undesirable.

5. The aim of the program must be positive. The program must give help. Its primary purpose is to teach and guide--not catch and judge.

6. The program should focus on questions of right and wrong but not ignore appearances of right and wrong. Appearance may be as damaging to the reputation of the company as fact.

7. Issues that may involve possible questions of ethics arise unexpectedly and often unpredictably. Because there is sometimes little time to decide, a means or method of obtaining emergency assistance is necessary.

8. Most issues of an ethical nature are practical matters of fact. When the relevant facts are gathered, the question is answered and the concern is resolved. Few of the issues faced by employees are real moral dilemmas although they appear to be very perplexing at the moment. Employees do not need to be moral philosophers to solve most ethics-related questions they may face.

9. Many questions of an ethical nature would never arise if communications were stronger in the basic relationships between employer and employee, employee and customer, employee and supplier, employee and shareholder, and employee and community. Likewise, many questions that escalate into issues of ethics would arise less often if common civil virtues like trustworthiness, loyalty, helpfulness, friendliness, courtesy, kindness, cheerfulness, and respect were practiced regularly.

10. An ethics program has certain inherent limitations based on the fact that it depends on people for implementation. There can be written standards and carefully defined policies, but the program can do little to change individuals who intentionally engage in misconduct.
(pp. 23-24)

Item nine of the lessons learned specifically addresses the need for stronger humanistic values as a key element of the Ethics Program. It is clear that most communications about and impressions of the Ethics Program's objectives included a conceptualization of the relationship between ethics and other human resources issues such as communication, civility, kindness, trustworthiness, and respect.

General Dynamics Corporation also noted that some negative reactions to the Ethics Program still persisted two years after its implementation. Some employees felt that ethics is a personal matter and the program is an affront to

their personal sense of integrity by implying that something is wrong with their ethics. Others thought that the program was a good idea, but it really did not apply to them personally because they do not make important decisions. Some employees felt that the program was a means to "snitch" on other employees, while some feel that reporting offenses is reprehensible no matter what the circumstance.

Ethics Program Planning Evaluation

There were two interview groups that provided personal assessments and observations on the Ethics Program. The first group, which I labeled the planning group (five individuals), was asked questions about the planning process that resulted in the Ethics Program. The second group, which I labeled the cultural group (fifteen individuals), was asked questions of a general nature about the Ethics Program and its effect on the organization. Following is a summary of the planning group respondents' assessments of the planning process.

The unanimous opinion of the planning group was that the Ethics Program of General Dynamics was created and implemented because of economic pressures from the environment, specifically an agreement with the Navy to implement the program or lose business. The program was specifically designed to avoid losing legitimacy. This notion was supported by media sources (Larsen, 1987; Packard, Laird, Moot, Bowsher, & Conahan, 1988).

Two of the five respondents in the planning group specifically stated that the decision to implement the Ethics Program was not the result of a sense of moral obligation, but rather it was a decision based on business needs. One respondent added that if the end results were moral it would not be because moral ends were intended, but because they just happened.

The official objectives of the Ethics Program were to support individual employees in their daily business conduct, to enhance the administrative performance of the company in basic business relationships, and to help build trust between the company and its customers, suppliers, employees, shareholders, and the communities in which the company functions (General Dynamics Corporation, 1988). The planning group unanimously suggested that one program objective was to provide a mechanism for employees to voice complaints and receive guidance on questionable behavior. Other objectives cited by the planning group were that the program was designed to make sure that employees understood the rules of the game regarding proper personal and business conduct, to promote a professional image of the company, to gain public trust, and to keep lines of communication open.

The planning group unanimously agreed that the Ethics Program can be considered effective and successful. As evidence, the respondents cited high usage of the various channels for complaints and inquiries, high levels of employee trust in the program, fair and timely

investigations and appropriate corrective actions, and new employee attitudes toward customer and public relations. Three respondents pointed out that the company had not been involved in the latest sweeping scandals involving government contractors. Government officials tend to support the claim that the Ethics Program at General Dynamics was successful ("General Dynamics," 1989; Packard, et al., 1988).

The planning group unanimously stated that the Ethics Program had become permanent and could not be discarded without serious repercussions. Two respondents remarked that it was institutionalized, but one respondent stated that he felt it had not yet become institutionalized because there was still some resistance to the program. All five respondents felt that the program was properly planned, that commitment from top managers was strong, that the organization for administration of the program was appropriate, and that communication of the program objectives was adequate. One respondent felt that implementation could be considered ineffective because supervisors had been allowed to retaliate against employees who were known to have used the hotline. Blatant retaliation had been controlled effectively, but there were no controls on the subtle forms of retaliation that can make a subordinate's life miserable. Other suggestions for improvement from the planning group included (a) providing a mechanism for interdivision and corporatewide referrals, (b)

making the issues more visible (they are currently considered company private information), (c) publicizing the disciplinary actions by category, (d) investigating what possible issues are not raised and why, (e) structuring the investigation process so that it is less intimidating, and (f) providing more program representatives for outlying facilities.

All respondents in the planning group felt that potential resistance to the program by employees was properly planned for and counteracted by building trust through education, communication, and individual counseling. The planning group perceived that union officials, suspicious employees, chronic complainers, low performers, and some supervisors were sources of the resistance. They perceived the primary source of resistance to be union officials and strong union supporters because the Ethics Program somewhat undermined their grievance procedure.

All respondents felt the company had been successful in maintaining the changes intended by the Ethics Program. Changes had been both beneficial and consistent. Examples of actualized intended changes cited were (a) widespread consideration of the spirit of the rules as well as the language, (b) detection and resolution of issues while they were still small and relatively harmless, (c) disclosures to customers were becoming commonplace, (d) complaints were receiving immediate attention, and (e) general changes in employee attitudes and conduct concerning record keeping and

record accuracy, particularly those related to financial issues, expense reporting, and time cards.

Surveys and Interviews

The 1986 Survey of Employees

The comprehensive survey conducted by General Dynamics Corporation in 1986 was intended to "provide an ongoing assessment of employee attitudes toward company policies and procedures, management practices, and job satisfaction" (General Dynamics Corporation, 1986, p. I-4). The results of the survey were intended to be used to "respond to employee needs, customer expectations, and the changing business environment" (p. I-4). The objectives of the survey were listed as the following:

1. Assess employees' perceptions of present and new company policies and procedures.
2. Provide employees the opportunity to contribute directly to the changing environment of our company.
3. Establish an ongoing action process aimed at improving the company's organizational effectiveness.
4. Determine the current level of employees' job satisfaction.
5. Enhance two-way communications between employees and management.
6. Demonstrate concern for employees through communication and collaboration.

7. Define key strengths and key opportunities to improve the company.
8. Ensure the results are not used to the disadvantage of unions.
9. Accurately report results, both favorable and unfavorable.
10. Develop managerial skills in communication, group feedback, and collaborative action planning.
11. Maintain confidentiality of individuals. (p. I-4)

The first five objectives were called initial objectives and the last six objectives were called feedback objectives.

The relationship between the survey and the Ethics Program is specified in objectives one and two. The new policies and procedures referenced in those objectives are specifically those implemented for the Ethics Program. Survey items 27-30, 78-93, and 114-122 were specifically designed to explore the effectiveness of the Ethics Program to that point in the process (Appendix A). Table 3 indicates total corporate and Electronics Division responses to items 27-30.

Item 78 asked respondents to evaluate the need for change before the Ethics Program was implemented. Fifty-nine percent of the total corporation respondents felt change was needed, and 11% felt none was needed. Of the Electronics Division Employees, 53% felt change was needed and 12% felt none was needed. Item 79 requested that

respondents evaluate the amount of change that was instituted by the Ethics Program. Of the total corporation

Table 3

Ratings of Perceived Interests of General Dynamics

Item	Sample	Ratings *	
		Good	Poor
27. Welfare of community	GD	57%	11%
	ED	47%	13%
28. Welfare of employees	GD	38%	26%
	ED	34%	28%
29. Customer relations	GD	62%	9%
	ED	64%	6%
30. Public relations	GD	38%	26%
	ED	35%	28%

* medium and no opinion ratings were omitted

respondents, 42% felt that more change was needed, and 11% felt that there was too much change. In Electronics Division, 43% felt there could be more, and 23% felt there was too much. Item 80 asked if respondents agreed that the right kinds of changes were implemented. Total corporate response to item 80 was not reported, but 36% of Electronics Division respondents agreed and 41% disagreed.

Items 81-89 asked respondents to evaluate the impact that the changes would have in various areas. Table 4

illustrates the responses to items 81-89 for both the total corporation and for Electronics Division.

Table 4

Responses Evaluating The Impact of The Ethics Program

Item	Sample	Impact	
		Increase	Decrease
81. Accurate expense reporting	GD	68%	4%
	ED	72%	5%
82. Accurate time card reporting	GD	68%	7%
	ED	73%	8%
83. Fair competition	GD	not reported	
	ED	42%	8%
84. Cooperation with customer	GD	not reported	
	ED	43%	7%
85. Efficiency of division	GD	31%	27%
	ED	26%	32%
86. Division ethical behavior	GD	not reported	
	ED	57%	5%
87. Trust of public	GD	57%	6%
	ED	57%	4%
88. Trust of customers	GD	63%	4%
	ED	66%	3%
89. Ability to compete	GD	not reported	
	ED	47%	12%

Items 90-93 asked respondents to assess their own level of involvement in the Ethics Program. Responses to items 90-93 are represented for the total corporation and for Electronics Division in Table 5.

Table 5

Personal Involvement In The Ethics Program

Item	Sample	Rating	
		Agree	Disagree
90. I understand reasons	GD	71%	8%
	ED	80%	7%
91. Clear about my responsibility	GD	83%	5%
	ED	88%	5%
92. Change well implemented	GD	not reported	
	ED	65%	10%
93. Division mgmt. committed	GD	not reported	
	ED	61%	14%

Items 114-118 asked respondents to assess the extent to which the company is ethical and perceived as ethical. Responses to items 114-118 are represented for both the total corporation and for Electronics Division in Table 6.

Items 119-122 asked respondents to rate the effectiveness of the ethics hotlines and workshops, and responses for both total corporate and Electronics Division samples are represented in Table 7.

Table 6

Ratings of the Business Ethics of General Dynamics

Item	Sample	Rating	
		Good	Poor
114. General Dynamics' ethics now	GD	56%	12%
	ED	65%	7%
115. Own division's ethics now	GD	63%	11%
	ED	67%	7%
116. GD's ethics one year ago	GD	25%	43%
	ED	36%	30%
117. Div.'s ethics one year ago	GD	not reported	
	ED	49%	18%
118. Customer's rating of division	GD	not reported	
	ED	43%	24%

In addition to exploring the effects of the Ethics Program, the survey was intended to provide managers with information about employee attitudes and with a tool that could be used to correct any problems (General Dynamics Corporation, 1986). Fifty-seven percent of the total corporate sample and 55% of the Electronics Division sample reported that they were satisfied with the company (Item 123), and 62% and 65% respectively reported that they were proud to work for General Dynamics (Item 75). Seventy-two percent of the Electronics Division sample were satisfied with their jobs (Item 2).

Table 7

Ratings of Ethics Hotlines and Workshops

Item	Sample	Rating	
		Agree	Disagree
119. Hotline is a good idea	GD	71%	7%
	ED	74%	6%
120. Hotline gets action	GD	not reported	
	ED	46%	12%
121. I'll be hurt if I use it	GD	32%	26%
	ED	31%	28%
122. EP workshops are effective	GD	46%	20%
	ED	52%	17%

For the Electronics Division, 45% rated the division performance good (Item 141), but 70% rated the division high on technological development (Item 12), and 74% rated the division high on product quality (Item 13). Only 20% felt the division was efficient (Item 17), and only 22% felt the division was effectively managed (Item 72). In addition, only 33% felt the division was innovative (Item 16), and only 28% felt Electronics Division had a clear sense of direction (Item 18). A lower percentage, 24%, felt the division planned effectively.

In the Electronics Division sample, there was a clear critique of top division managers. Sixty-four percent rated their supervisor as good (Item 153) and 59% rated top

corporate management as good (Item 155), while only 26% rated division top management as good (Item 154). A good deal of this criticism can be accounted for by considering interdepartment cooperation and decision making. Only 26% of the sample felt the division had a cooperative atmosphere (Item 20), and only 20% agreed that decisions were made without undue delay (Item 61) even though 52% agreed that the lines of authority were clear (Item 47). Sixty-four percent felt the level of cooperation within their own department was good (Item 144), but only 41% rated cooperation with other departments as good (Item 145). Only 27% of the sample felt the division was interested in the welfare of its employees (Item 21), while 54% felt they were treated with respect and dignity (Item 7).

Following the development and administration of the survey, managers were supposed to analyze the results for their own departments, meet with employees and discuss problem areas, and develop and implement action plans to resolve the problems identified. Instructions for developing the action plans and specially designed worksheets were distributed to all upper level and middle level managers. All supervisors had access to the instructions as well.

Electronics Division created an action plan with the following three requirements for all supervisors and managers: (1) all levels must conduct periodic staff meetings, (2) all levels must be committed to an open door

policy, and (3) all levels must provide employees with more frequent feedback on expectations, recognition, and corrective actions for poor performance. Action plans were supposed to be incorporated into departmental objectives, then into division objectives, and finally into corporate objectives for an integrated corporate plan (General Dynamics Corporation, 1986). Progress on the implementation of the plans was reported at monthly business reviews. In addition, the monthly corporate newspaper, General Dynamics World, carried articles in nearly every edition about progress on the various action plans. The entire issue of the July, 1987 General Dynamics World was devoted to the corporate action plan as well as the general division action plans for each division. Nearly every issue of the Electronics Division newspaper, The Current, from early 1987 to 1989, featured the action plan and progress in implementing the plan of one of the major departments. I wrote the article featuring the implementation of the Material Department action plan in The Current ("Employee Survey," 1989).

Internal Surveys

The Division Vice President of Material met with his staff in late 1987 to formulate an action plan for the Material Department. After reviewing the results of the survey items for the department, 12 items were selected as indicating problem areas. Criteria for selection included a high percentage of unfavorable responses by Material

employees responding to the survey, a critical area of employee relations, and a reasonably workable problem within the control of the Vice President and his staff. An unfavorable response was a combination of disagree and strongly disagree, poor and very poor responses, or an agreement with a negative statement depending on the nature of the item. The degree of criticality and workability was judged by a consensus of the staff members. The items selected and the percentage of unfavorable responses are given in Table 8.

Table 8

Items Selected For Action By The Material Staff

Item No.	Issue	% Unfavorable
154	Performance of top management	46%
72	Division effectively managed	52%
61	Delays in decision making	54%
62	Frequent changes in decisions	50%
18	Clear sense of direction	57%
106	Organization well suited to work	48%
59	Understanding promotion policies	64%
53	Feedback from supervisor	54%
107	Improved working conditions	64%
33	Equitable distribution of work load	48%
20	Cooperative working atmosphere	79%
39	Correcting poor performance	69%

Along with the three elements of the division action plan, the Material staff adopted the following corrective actions: to define and communicate the goals and reasoning for decisions, to improve communication on objectives, performance, and business directions, to reorganize to integrate elements of MRP II and to increase cooperation, to train supervisors in interpersonal relations and basic communications skills and in disciplinary action, to investigate options for improving facilities, to communicate promotion and advancement policies, and to be more sensitive to an equitable distribution of work loads.

In March, 1988, I conducted a brief survey at the request of the Vice President of Material to assess progress on the action plans. The survey asked respondents to list the top ten problems in the Material Department. A total of 50 surveys were returned out of 314 employees (16%). The low rate of return suggests that the results should be considered biased.

Of the respondents to the March 1988 Survey, 36% indicated there was not enough communication about division activities; 24% felt their supervisor was incompetent; 10% complained of sexism; 16% complained of disrespectful treatment from their supervisor; 34% indicated that operations were inefficient or wasteful; 32% felt procedures were not followed adequately; 24% felt there was inadequate planning; 34% felt their managers were inconsistent; 34%

were concerned about future business; 24% were concerned about their career mobility; 40% indicated a communication problem between supervisors and subordinates; 54% mentioned at least one problem with facilities; 42% indicated communication problems with other departments; 22% felt low morale was a problem; 28% felt unprofessionalism was a problem; and 28% felt training opportunities were inadequate for employees.

In June, 1989, I conducted another internal survey of the Material Department. This survey used the exact wording of the original 12 items of the 1986 Survey of Employees selected by the Material Staff (Table 8) and two more were added which specifically asked for evaluations of the performance of the Division General Manager and the Vice President of Material (Appendix C). This time the sample was 205 out of a population of 269 employees. Table 9 represents a comparison of responses to the June 1989 Survey with those corresponding items of the 1986 Survey of Employees.

There was surprisingly little difference between the results of the two surveys. The only issue where there was any apparent gain was in a clear sense of direction (Item 18). There was almost an equivalent loss in the area of managers changing their minds (Item 62). There were no significant differences between the two samples. It was clear that employees rated the management performance of the Vice President much higher than those of the General

Table 9

Comparison of Unfavorable Responses of the Two Surveys

Item No.	Issue	Survey	
		1986	1989
154	Performance of the General Manager	38%	32%
N/A	Performance of the Vice President	--	12%
72	Division effectively managed	52%	52%
61	Delays in decision making	54%	57%
62	Frequent changes in decisions	50%	59%
18	Clear sense of direction	42%	31%
106	Organization well suited to work	37%	44%
59	Understanding promotion policies	57%	54%
53	Feedback from supervisor	37%	39%
107	Improved working conditions	64%	71%
33	Equitable distribution of work load	52%	48%
20	Cooperative working atmosphere	44%	46%
39	Correcting poor performance	74%	72%

Manager. There was also some improvement in organizational structure and working conditions.

In addition to 1986 Survey of Employees which was a comprehensive survey of all General Dynamics employees, the March 1988 Survey which was conducted to identify general problem areas in the Material Department, and the June 1989 Survey which was conducted to be compared with responses on the 1986 Survey of Employees, I used data from two other

surveys: the April 1983 Survey and the February 1989 Engineering Survey.

The April 1983 Survey (Appendix B) was conducted to explore functional organizational difficulties as well as to assess organizational effectiveness. The survey asked the respondent to list common organizational problems (Item 3). No records of percentages of responses were kept, but the common problems identified by respondents were listed in the final report.

The common problems attributed to managers, supervisors, and fellow employees by Manufacturing and Material Control Department respondents were the inability of lower level employees to arouse interest in potential problems, failure of managers to provide support in resolving problems, failure of managers to specify clear priorities, slow status reporting mechanisms, insufficient self-discipline, insufficient communication between departments, failure of employees to understand the responsibilities of other departments, duplication of effort, insufficient checks and balances, failure to schedule and plan workloads, and allowance of too much work backlog.

The survey conducted by the Engineering Department in 1989 was designed to examine the communication changes within the department since the 1986 corporatewide survey. The questionnaire was created by a review team to evaluate the impact of the Engineering Department action plan. A

nonrandom sample of only 8% of employees from the department of over 900 responded to the survey so the results cannot be considered reliable. The survey report concluded that after the implementation of the action plan in 1987 the levels of upward, downward, and bidirectional communications increased, but by 1989 they had dropped to preplan levels.

Even though data from some of the internal surveys are limited in scope and reliability, they indicate an underlying attitude that seems to have remained constant at least since the April 1983 Survey. This organizational noise can be understood as characteristic of the organization's culture in the sense that it represents prevailing beliefs about the relationship of the organization and its employees. The prevailing beliefs are that there is little effective communication within formal networks, that there is little respect between managers and employees, that morale is consistently low even in relatively prosperous times, and that opportunities for employees are low even though most openings are filled from within.

Interviews

Interviews were conducted with two groups of employees. The planning group respondents (five individuals) were interviewed primarily for their impressions and insight into the organization's planning process in relation to the Ethics Program. The cultural group respondents (fifteen individuals) were interviewed to determine their

understanding of the organization and their experience of being members.

Both the planning group and the cultural group were asked to give some assessment of certain cultural aspects of Electronics Division. Subjects in the planning group were asked to evaluate the level of innovation in the company. All respondents agreed that General Dynamics is innovative in the technical areas, and that the Ethics Program was innovative. Two respondents felt the company had not been innovative in human resources areas; two cited programs such as the Manufacturing Resource Planning (MRP II), Total Quality Management (TQM), and Focused Business Units (FBU) as evidence of innovation, but none of them are human resources programs; and one respondent suggested that some divisions (not Electronics) had been innovative in human resources areas besides the Ethics Program. There was tacit agreement that Electronics Division cannot be considered innovative in human resources areas. Critical comments suggested that the company was low on concern for employees, too bureaucratic, reactive and not proactive, dictatorial, low on risk taking, and slow to change. Positive comments suggested that the company can execute programs well once the commitment has been made. However, three respondents commented that programs are often implemented on paper and put into the objectives without appropriate funding and support.

The planning group was also asked to assess the changes in the company over the previous three years. Four of the five respondents framed the changes at General Dynamics in a positive perspective, and all four attributed the positive changes to Stanley Pace, the Chairman of the Board and CEO. The one respondent who was critical of the changes focused on Electronics Division.

The negative assessment of the changes in Electronics Division made by the one respondent revolved around the influence of the General Manager as the primary factor in the negative outcome. Specifically, the criticism focused on poor planning, poor organization, top-down and one-way communication, excessive internal conflict, an atmosphere of competitive noncooperation, excessive senior management attention to detail and neglect of widespread problems, and limited decisive action on and support of employee oriented programs. The negative respondent cited the Ethics Program as the only notable exception in a generally nonemployee-oriented atmosphere.

The four positive respondents all assessed the changes from the perspective of the whole organization. Positive assessments focused on the Ethics Program as a vehicle for employees to express concerns without having to use a formal grievance process, corporate level financial strategies, corporate level proactive marketing, new cost competitive strategies, the perceived concern of Pace for the employees of the company and his accessibility, improved community

relations, improved customer relations, and increased communications of both good and bad news.

One of the participants in the cultural group had complained that employees in the past had actively participated in setting departmental objectives which they were no longer able to do. I asked one planning group respondent who was intimately involved in business planning processes to comment on that specific change. The respondent, who had provided a positive assessment of the changes, suggested that senior managers purposely limited employee input into the planning process because too many inputs from the bottom confused the issue. Senior division managers had apparently decided that the directive approach was more efficient.

All 15 members of the cultural group were consistently critical of senior division managers. When responding to the question of how the organization has changed, the entire cultural group was consistently negative in their assessment. Even the most positive of the respondents were concerned about unannounced management decisions that would eventually affect them. Of the sample, hourly employees and middle managers were the most critical. The least critical responses were offered by salaried professionals.

A new organizational structure recently installed in the division drew negative criticism from 11 of the 15 respondents. Criticism was directed toward the dual lines of authority (one person reports to two bosses), the

atmosphere of competition and noncooperation created by the new structure, and the confusion generated by diffused responsibility and unclear authority. Respondents were also critical of the cost reduction strategies imposed by the new organizational structure that deemphasized the importance of people in the production process, and decreased support costs to a level where adequate support was impossible.

Nine of the 15 respondents criticized the Ethics Program. The most common observation was that the most unethical activities had been unreported. The most common suggestion for improving the program was to implement some protective measures for whistleblowers. As one respondent put it: "Everyone knows that whistleblowers are penalized. Nobody is going to report something that will limit his career. Look what happened to the people at Northrup." Three other respondents suggested that anyone who points out problems or proposes an alternate point of view is labeled "uncooperative."

Seven respondents cited other employee-centered programs as negative changes. Three were critical of the new flexible benefits program for various reasons, four were critical of the recently signed contract with the union, one was concerned that employees were no longer asked by their supervisors to list their personal objectives which might be incorporated into the organizational objectives. This activity was previously an annual activity that coincided with merit reviews. Fourteen respondents suggested that the

division had become less employee oriented in the previous three years, and that the atmosphere had become more repressive.

Positive changes were listed by ten respondents. These changes included the transition of the material systems to MRP II, the emphasis on communication, the improved public image of the company, the emphasis on cost competitiveness and streamlining, the modernization of methods and equipment, less conflict between certain departments, and the Ethics Program.

Some assessments of the changes were suggested by cultural group respondents that implied contradiction. For example, two respondents believed the Ethics Program was good and was working but that no real changes had taken place. Two other respondents felt the corporation had adopted programs that benefited the employees but that managers felt no concern for their employees.

Most cultural group respondents attributed changes experienced within the organization not to the Ethics Program, but to outside influences or top manager behavior. Only two respondents suggested that the changes were the result of new attitudes and work behavior of the employees that might have been inspired by the Ethics Program. Changes were variously attributed to turnover and shifts in management personnel, MRP II, management philosophy and style, economic factors, government pressure and budget cuts, competition in the marketplace, environmental factors,

and top management desire for improved image. The most commonly cited factor for influencing change was the economy.

Five respondents suggested that the first line supervisors were the primary catalysts for making things happen. Of these five, three were middle managers, one was a salaried professional, and one was an hourly employee. The other four hourly employees suggested that the workers, themselves, make things happen. Four salaried professionals suggested that middle managers make things happen, while the remaining two suggested that whoever has the most pressing crisis makes things happen.

The respondents were fairly consistent in their assessment of how the various movers actually make things happen. The strategies used were politics, yelling the loudest, power plays, intimidation, controlling the budget, negative reinforcement, big egos, directing, and acting on priorities.

The responses given identifying who solves the problems were similar to those identifying who makes things happen with some minor exceptions. Three respondents suggested that special teams assigned to resolve major problems (red teams) were the primary problem solvers, and one salaried professional suggested that senior managers solve the problems. Most respondents cited first line supervisors and workers as the primary problem solvers.

When asked for speculation on what changes were needed in the organization, there was a wide variance of opinion among the cultural group respondents. The most commonly mentioned needs were focused on the actions of senior managers: more communication of long-range plans, less whitewashing of problems, less power politics, more people orientation, more managing by walking around, more mutual respect and kindness, more courtesy and recognition, less fear tactics, more tolerance for difficult people who are competent in their job, more straightforwardness and honesty, less micromanaging, less requirement for needless statusing, more interpersonal skills, more consistency of actions and words, fewer levels of management, more attention to employees' needs, better planning and organizing of work, more positive reinforcement, more consistency in giving awards and merit increases, and more caring about the organization. Other suggestions were that employees should be involved to a greater extent in the organization's planning activities, and that there should be more cooperation between employees in different departments. Senior managers were criticized heavily for being cold, uninvolved, and uncaring. Those critical of senior managers suggested that their behavior created low morale, frustration, discouragement, and the resulting low levels of productivity in employees.

The cultural group was fairly consistent when assessing the characteristics of a good employee. All of the

respondents cited attitude as a major factor, but few of them were able to define this attitude. A good work attitude was characterized as focused on the employee's behavior toward others: cooperative, positive, enthusiastic, not defensive, responsive, supportive, and ready to help. Other suggested characteristics focused on the employee's productivity: willing to contribute, looks for things to do, wanting to get the job done, quick turn around, thoroughness, and follow-through.

When asked to identify a person who embodied the ideal, four respondents indicated that there were none in the division. Three females picked female supervisors, one male manager picked a female subordinate, and the remainder of the sample picked male supervisors or managers. When justifying their selections, respondents again focused on relationships with others and productivity factors: knows her job, attention to detail, confident, poised, well liked, knowledgeable, respected by peers, hard worker, always helps, does job even if she disagrees with procedures, takes interest in her employees, personal integrity, never gives up, works well with employees, good planner, high performance, independent, a happy employee, intelligent, creative, good life priorities, good job priorities, and creates positive atmosphere.

All of the respondents except two stated that feedback from their supervisor was key to whether or not they knew they are doing a good job. One of the respondents felt that

she had to know on her own because she could not trust her supervisor, and one felt that verification had to come from someone she respected. Other suggestions were that one knew one was doing a good job when the work got done, when schedules were met, and when problems were solved.

The factors other than money that respondents reported as the reasons for their remaining in the company were pride in one's job, security, job satisfaction, benefits, familiarity with the job, relationships with coworkers, company prestige, sense of accomplishment, and challenge. Most respondents indicated that money was the major factor. Three respondents were actively (and secretly) looking for another job. When asked about their favorite stories about the company, three respondents cited stories about things that happened at work, one cited extra curricular activities in the management club, and the remainder cited personal stories about coworkers.

When asked if they felt that top managers were trying to do the right thing for employees and the public, the cultural group unanimously responded no. The reasoning for this judgement was that whatever managers do is either for the sake of the company's public image or for personal gain. Respondents proposed the following comments as characterizing company managers: political games, power plays, no loyalty to subordinates, would sell people down the river to get ahead, too wrapped up in their own problems to be concerned about employees, employees are nonessential,

worried only about profits and image, do not know enough about the employees to be able to do anything, no regard for humans, interested only in producing the product at the lowest cost, would eliminate employees altogether if possible and replace them with robots, lay off people with no concern for their welfare, profit orientation to the exclusion of everything else, no respect for the human condition, uncaring, too self-centered and self-serving, and concerned only for their image.

The above information reinforces the pervasiveness of the organizational noise indicated by the various survey results. The interview respondents were selected because of their generally positive (or at least neutral) attitude toward their work and toward the organization. All of the respondents can be characterized as reasonably successful in their work. Yet, their feelings are consistently pessimistic about the relationship between the organization and its members.

Cultural Assessment

As Schein (1986) suggested, the culture of an organization is a collection of basic assumptions about the nature of reality, the nature of the world, and the nature of people. Cultural influences in an old, bureaucratic organization such as Electronics Division are deeply held and pervasive values. Newcomers into the organization tend to be selected on their perceived tendency to embrace those

values. There is no scientific way for a researcher to formulate an understanding of an organization's culture by simply compiling answers to questions.

I studied the data from the organization's history and from the various surveys and interviews and considered their relationship with my own experience of the organization. I paid particular attention to the massive inconsistencies that seemed to present themselves at every turn. I concluded that the culture was based on a contradictory foundation, and that it contained fundamentally opposing assumptions. The following cultural assessment based on data gathered was presented to the cultural group members and was given blanket approval by respondents.

General Dynamics is a large, complex, bureaucratic organization. General Dynamics Corporation in general and Electronics Division specifically show two distinct and interwoven lines of cultural influence: military and engineering. The military influence is derived from the customers who are usually military organizations and from the many employees at all levels of the organization who have had military service. Many employees are retired military personnel. The engineering influence is derived from the collective influence of the middle and senior managers who have engineering backgrounds.

The military aspects of the organization are apparent in the following organizational assumptions.

1. Order is more efficient and productive than ambiguity. Orderly appearance will necessarily result in positive outcomes. Rules are necessary to impose order on natural chaos.

2. Time is linear. Schedules are critical no matter how arbitrarily they were derived. Meeting schedules is absolutely required under all possible circumstances.

3. Physical space utilized for equipment and activity is limitless. For personnel, space allocated is a symbol of status. Distances are relevant only in a limited logistical sense. Separation by distance is unimportant to activities or communication.

4. Problems are defined by their necessity for action. Problems are solvable by committing sufficient resources to solve them.

5. Organizational hierarchies are necessary to define the chain of command. The chain of command is important to establish class and status distinctions as well as to clearly identify who has the right to give orders to whom.

6. Idleness is unproductive. Unless people are physically moving, they accomplish nothing. Discipline is critical.

7. People are basically lazy and unproductive, they need constant supervision to keep them disciplined. People are fundamentally inert and must be strictly directed in order to keep them active.

8. Human beings can be trained and disciplined. But the training wears off quickly and must be renewed constantly.

9. Communication of information must be controlled and released only to those whose need to know can be verified. All persons can be divided into one of two groups: friend or foe. Any individual is assumed to be a foe unless proven to be a friend; the process of proving friendship is ongoing and ceaseless. Information can only be released to friends, and even then with caution.

10. Heroes are those who take bold and decisive action in a time of crisis. Nothing is impossible: the failure to accomplish is a personal failure and the result of incompetence.

11. Human relationships are based on comradeship, which in turn is based on loyalty. Tradition and group identification (membership) are the most important elements of comradeship.

12. Rituals are critical in maintaining tradition. Rituals should symbolize and reinforce the hierarchy of authority, the importance of loyalty, the importance of order, and the importance of action.

The engineering aspects of the organization are apparent in the following assumptions.

1. Rationality is the only means by which one may find truth. The rational method is the only correct method, and will necessarily result in efficiency and effectiveness.

Rules are basic laws of the universe and result from natural order.

2. Time is cyclical. All events are manifestations of previous events and predictors of future events.

3. Physical space is limited. Both space and the things that occupy space can be altered to achieve maximum utilization.

4. The universe is mechanistic in nature. The organization is a machine, the outputs of the organization are machines, and the people in the organization are machines which are components of the larger organizational machine. The mechanisms must be constantly monitored for efficient operation. Organizational hierarchies represent the natural mechanical order in the universe.

5. Problems are mechanical in nature and are defined by their effects on the efficient operation of the machine. Problems are solved by adjustment of the mechanisms or replacement of the components.

6. People are fundamentally neutral. Their value must be determined in relation to their function and efficiency.

7. Humans are neither lazy nor hard working, they simply respond to their environment. Behavior is important only to the extent that it is consistent with the efficient functioning of the organization.

8. People can be trained for any task within their capability. Capabilities are fixed at birth and are absolute limitations on abilities. People have an operating

lifespan and will function effectively as long as they are well maintained. As people get older, they wear out and become obsolete. Newer models are better because they are less worn and incorporate all the latest technology.

9. Heroes solve problems. Really big heroes are those who solve really big problems.

10. Human relationships are based on hierarchies of functioning within the organizational mechanism. Relationships based on other grounds tend to interfere with operations. Communication should be rational and efficient.

11. Rituals are important if they follow operating procedures. Rituals that interfere with operations are needless and possibly dangerous. Rituals should symbolize effective functioning, and efficient operating procedures.

The above cultural assessment indicates some severe conflicts that may have a debilitating effect on the organization. Organizational functioning cannot possibly continue smoothly when individuals operate on different basic assumptions at different times. In addition, two individuals within the organization who are operating on different sets of basic assumptions would have a difficult time communicating because they would not understand each other's values. It is entirely possible that most of the communication problems that make up the consistent complaints uncovered in the data were the result of the conflicting sets of cultural assumptions.

Within Electronics Division, the engineering cultural framework was generally more predominant than the military culture. But certain elements of the military culture are persistent in guiding managerial behavior. These elements tend to manifest themselves in strong tendencies to create procedures, strong adherence to schedules, strong needs for hierarchies and for symbols of status such as executive dining rooms and private parking spaces, strong discipline, strong control of information, and bold actions, even if they are unrelated to the issue at hand.

The engineering cultural framework also reinforces the tendency to create procedures to some extent. But the engineering framework also tends to define procedures as obstacles to problem solving. The tendency of the engineering orientation is to use procedures only when they are seen as critical to technical outcomes. Also within the engineering framework, there is much less emphasis on meeting schedules and much more emphasis on control of the organization and solving problems. The engineering framework encourages excessive attention to detail by senior managers and incessant adjustment of organizational mechanisms. Many of the complaints registered by the respondents were the result of unnecessary and inappropriate tinkering with organizational processes by senior managers who were reluctant to release control to lower levels of the organization.

One of the problems in implementing change within the engineering framework is overcoming the strong need for control that senior and middle level managers seem to feel. Management controls, usually in the form of charts that show progress toward specific goals, tend to take on a ritualistic character within the engineering framework. Once people within the organization have created these controls and the mechanisms for updating them, they are reluctant to change or release the controls and formulate new ones. One of the difficulties of implementing a program such as the Ethics Program is that the nature of the changes involved does not lend itself to the style of management control typically seen at Electronics Division.

Conclusion

Planning procedures and contextual framework were in place in the organization. The strategic planning process included an adequate assessment of the environment and the context of the organization within the environment. Plans and performance to objectives were essentially communicated to employees. General Dynamics had what appeared to be an adequate strategic and operational planning process.

The Ethics Program was created because of a business need, but employees understood the program as a vehicle for voicing complaints and raising concerns about human resources issues as well as legal behavior. Even though the program should have been directed exclusively toward rules

and rule following behavior, which is the definition of morality within the organization, it became a process of examination of morality within a broader, social context: treating people with dignity and respect. Internal surveys and interviews indicated a consistently critical assessment of the managers' concern for employee welfare, internal communication, and the maintaining of a fair workplace.

The Ethics Program was initiated because of economic pressures, but there is little doubt that its creators intended to use it to make the organization into a better organization. In order to make General Dynamics a better or, at least, a more ethical company, senior managers set out to change the culture of the organization. The management controls used to monitor the Ethics Program indicated that the program met its specific objectives. But the management controls used to monitor the organization have shown little change in employee attitudes. The most viable explanation seems to be that the senior managers had no operational understanding of the culture they were trying to change. If they had, it is reasonable to assume that they would have set up some sort of system to bring about a culture that reinforces ethical and humanistic values and minimizes conflicting values.

CHAPTER V

DISCUSSION AND RECOMMENDATIONS

Summary of Results

The analysis of the documentation, surveys, and interviews indicates that the planning process at General Dynamics Corporation was generally a linear, rational, and step-wise process. The strategic plan addressed the four issues of planning suggested by Byars (1984): (1) organizational identity, (2) business posture, (3) future direction, and (4) strategy. One pluralistic feature of the planning process was the participation of the division general managers in the development of business plans. Plans were not directed from the top, but negotiated. However, this feature was overridden at times by occasional "nonnegotiable" planning elements, the Ethics Program for example. Although corporate level plans generally addressed the three cultural uncertainties suggested by Tichy (1983), technical, political, and cultural, there was little evidence that political and cultural uncertainties were addressed in any systematic way within Electronics Division. The division was oriented toward technical uncertainties.

Corporate mission statements placed the needs of customers and shareholders before any other claims. Corporate business strategies stressed both quality and cost efficiency equally, a condition which both Schuler (1989) and Emerson (1985) have suggested may be incompatible with consistent human performance. Corporate strategy seemed to change somewhat from the strategy of innovative differentiation as outlined by Porter (1980), wherein the company captures the market through product innovation to a strategy of cost leadership that requires maximum cost efficiency. The results suggest that parochial priorities had not been controlled sufficiently to implement an effective cost reduction strategy in Electronics Division.

The Ethics Program was clearly implemented as a result of pressure from the environment, and may never have been created otherwise. The program was planned and executed according to corporate policies and procedures. Communication of the objectives of the Ethics Program was extensive and well understood by the employees. It is entirely possible that employees expected the Ethics Program to be something more than it was. An equal possibility was that Stan Pace envisioned the program as a broad, sweeping reform of the cultural flaws that can result in both purposeful and unintentional illegal behavior. The broader goal of the Ethics Program as stated in the introduction to the handbook (Appendix H) was to involve every employee in bringing a sense of honesty, fairness, and integrity to the

job. The introduction, written by Pace, also warns that the future of the company depends on employees' goodwill, judgement, self-discipline, common sense, and integrity. In either case, the Ethics Program at General Dynamics became symbolic of the efforts to eliminate legal and humanistic wrongdoing.

The lessons that General Dynamics specified as having learned from the development and implementation of the Ethics Program, as noted in Chapter Four, generally indicated that people are the major resource for the successful implementation of such a program. The program, in turn, gave employees a mechanism for voicing their complaints, although some indicated their reluctance to use the communication channels for fear of reprisals.

Employees using the communication channels established for the program were primarily concerned with unclassified employee and personal relationship questions not specifically covered by the program. Some communications were concerned with program parameters like time card reporting, suppliers and consultants, the use of company and customer resources, and gifts, gratuities, and entertainment.

Results from the surveys and interviews indicated that the Ethics Program was successful in meeting its objectives of communicating the rules and standards of conduct and improving the company's image. But the broader goal of creating a working environment that is founded on humanistic

treatment, personal dignity, and mutual respect was not realized within Electronics Division in the period of the study.

Despite the apparent success in attaining the specific objectives of the Ethics Program, there seemed to be little change in employee attitudes in Electronics Division. Employees indicated that they felt their senior managers had no concern for the welfare of themselves or the community. In addition, they indicated that, although they liked their jobs and liked working for General Dynamics, they were basically unhappy. Sources of unhappiness seemed to be widespread internal conflict, management ineffectiveness, organizational inefficiency, and insufficient communication of a direction for the division. Regardless of the progressive status reports, there has been little, if any, change in the areas that concerned employees the most.

Discussion

The purpose of this study was to determine how persons in leading positions can realistically expect to plan and implement a significant, planned organizational change. I undertook the investigation of three questions to fulfill this purpose using organizational change at General Dynamics from the period of 1985 to 1988. The Ethics Program was used as a case example of significant, planned organizational change and was investigated within the context of other organizational changes and processes. The

three questions were the following: (1) What changes took place at General Dynamics between 1985 and 1988? (2) Were the changes the result of the strategic plan? (3) Was the Ethics Program successful in meeting its specific objectives and its broader goals?

Changes Between 1985 and 1988

Considering the first question, the changes at General Dynamics can be identified fairly easily. During the period between 1985 and 1988, the company enhanced its reputation both with its employees and with its customers. Although most of the changes observed were brought about by business plans and economic directions, many actions within the company were undertaken to improve problematic conditions that surfaced as a result of the corporatewide survey. Although the changes may have been ineffective or insufficient from the employees' perspective, findings indicate that significant and meaningful changes have been incorporated into management practices within senior and middle levels. Some managers have used the program as leverage to enforce their sense of morality and fairness, and the managers who would knowingly violate the rules are at least forced to maintain an appearance of conformity.

There have been changes in the company's ways of doing business. As mentioned by several of the planning group respondents, the company has made it a common practice to disclose accounting and procedural mistakes to the government when these are discovered. The previous attitude

in the company was "if General Dynamics employees made a mistake, it was up to the government to uncover the error." Various product line and business related strategies have been strongly influenced by the Ethics Program. For example, many small spares and repairs contracts that were readily accepted before have been refused by the company because the nature of the cost reimbursement methods can easily result in actual item costs that exceed the reasonable market value of the item. Many other requests for proposals on new programs have been declined by the company because the program specifications would have required excessively expensive engineering or product testing. In both cases, the contracts were declined because the company has been sensitive to the appearance of overcharging the government. The environmental pressure that fostered the creation of the Ethics Program because of excessive overcharging has awakened the company to cost efficiency issues.

More specifically related to the Ethics Program, methods of charging work or expenses to the government that were commonly accepted ways of doing business by both the company and the Defense Department that were not necessarily in the best interest of the taxpayer have been eliminated altogether. Many of these methods were considered expedient ways of operating, and were not conscious cheating. Some of those methods were deliberate cheating. The awareness of both the inappropriate practices and the appearance of

wrongdoing had been heightened in the customers as well as within the company.

Many changes have occurred that were unrelated, or marginally related, to the Ethics Program. An internal audit program called the Management Effectiveness Program was implemented in 1985 to review the adequacy and effectiveness of policies and procedures in the divisions. In 1985, this program was directed by Corporate Headquarters which specified certain questions to be answered by each division about its operations, and specified certain actions to be taken. The Management Effectiveness Program underwent changes in focus each successive year as it identified and solved various organizational problems. By 1989, Electronics Division had developed to the point where it created its own effectiveness goals and reported its progress to Corporate Headquarters.

A flexible benefits program was implemented in 1988 reportedly because employees requested such a program through the 1986 survey. A more likely reason, shared by a planning group respondent, for implementing the flexible benefits program was to provide the company with a mechanism to have employees share in health insurance costs. Without this mechanism, the company would have been forced to cancel benefits to control costs. At least the program allowed employees to choose which benefits they would be willing to pay for.

A major organizational restructuring of Electronics Division was created by two separate events: the implementation of MRP II and focused business units. MRP II affected Material and Operations departments primarily and was designed to increase material procurement and shop floor control efficiency. MRP II required some major changes in the way business was conducted within the division. Primarily, the required changes centered on following procedures more strictly. The engineering propensity for tinkering with the organization had, over time, established a pattern of working around existing control systems to resolve problems. Senior and middle level managers frequently ordered employees to use shortcuts to existing procedures to resolve a production crisis. The employees who actually did the work generally resisted the shortcuts, but were overruled by senior managers. The shortcuts normally precluded updating of records because record keeping is the greatest time consumer and least contributor toward meeting production schedules. As a result, records were generally inaccurate.

MRP II cannot function properly with inaccurate records. Therefore, record accuracy had become a focus of awareness at Electronics Division because of the MRP II system implementation. The awareness of the importance of accuracy and record keeping probably enhanced or was enhanced by the main thrust of the Ethics Program which emphasized the accurate keeping of financial records. These

two forces working in tandem seemed to enhance their effectiveness.

In addition to supporting the objectives of the Ethics Program, MRP II forced some simplification of organizational structures to accommodate its relatively inflexible input and maintenance requirements. MRP II requires considerable communication and coordination between departmental functions that have major responsibilities for updating the system. The system organizations in the Operations Department and in the Material Department were streamlined and consolidated to accommodate the system. In tandem with this reorganization was another reorganization (focused business units) that was unrelated to MRP II system requirements. The reorganization of Electronics Division into focused business units was completed in May, 1989 after a year of planning and preparation. The focused business unit concept was thought by senior managers to increase division cost competitiveness, but was criticised by respondents in the cultural group and the planning group as a source of internal conflict and an "us-them" attitude of separation and internal competition.

The focused business unit organization essentially created three organizations out of one organization. Each organization was supposed to be largely independent of the others except for certain centralized administrative functions. The full impact of this change could not be evaluated properly within the time frame of the study.

However, initial reactions by interview respondents were decidedly negative. This may be partly the result of the strict secrecy of the planning process and the minimal and cryptic communication of the organizational changes and their meanings.

Another change that began late in 1988, again as a result of pressure from the Department of Defense, was the implementation of a program called Total Quality Management (TQM) which is based on the theories and practice of Japanese-style management and emphasizes quality enhancement. The TQM program had not progressed to the stage where it could have been evaluated within the scope of the study. However, initial reactions to TQM were positive, although guarded. Respondents felt that TQM would ultimately bring about the sort of humanistic changes that many had hoped for as a result of the Ethics Program. Some of the respondents were sceptical that any humanistic changes could be implemented in the division regardless of the nature of the program.

The Strategic Plan

Were the changes the result of the strategic plan? In answer to the second question, the changes listed previously originated in corporate strategic objectives. The company's approach to strategic planning was well ordered and environmentally based. Senior managers were consistent in their adoption of corporate strategic objectives. Division level objectives were printed on flyers and widely

distributed throughout the division. Employees who responded to interview questions were familiar with the objectives, but they did not seem to believe that the objectives pertaining to employee development were anything more than empty words.

General Dynamics had gained some competitive advantage over other aerospace companies during the time under study. But there seemed to be some confusion, especially within Electronics Division, over the conflicting objectives of a quality enhancement strategy and a cost competitive strategy. According to Schuler (1989), cost reduction strategies require repetitive and predictable behavior from employees, little or no expensive employee training, short term and results oriented focus, a high concern for quantity and a modest concern for quality, a good deal of employee autonomy and independence, and an atmosphere of stability and low risk taking. On the other hand, quality enhancement strategies require cooperative behavior, continuous employee training, long term and process orientation rather than short term results orientation, a high concern for quality and a modest concern for quantity, high levels of employee participation, and job security. The type of organizational environment required for successful implementation of a cost competitive strategy in many ways is diametrically opposed to the type of organizational environment required for a quality enhancement strategy. There is no reasonable way to

expect that both strategies could be implemented in the same organization at the same time.

The confusion caused by alternate emphases of quality and cost reduction is evident in the respondents' assessments of the organization. Employees surveyed and interviewed consistently criticized the division for inefficiency, ineffective planning, and conflict between departments. The most likely explanation for this response is that of conflicting strategies. As Emerson (1985) warned, inappropriate matches of strategies can result in partial and ineffective change plans which frustrate both the managers and the people who work for them.

The only element that the two strategies have in common is that employees should feel some level of job security to allow them to work effectively without feeling preoccupied with uncertainties. But the area about which the cultural group was most critical was that of job security. Division activities in 1988 included the transfer of work to low cost manufacturing facilities out of the geographic area and subsequent reductions in force. Employees losing their jobs were reassured in the formal announcement of the reductions that the division financial position would be greatly improved by the move. Since the knowledge of division financial strength had little meaning to employees about to lose their source of livelihood, it was no wonder that individuals interviewed felt that senior managers had little concern for employees' welfare.

Part of the problem may have been in the presentation of the various programs. Although corporate level communication of change plans was regular and consistent, division level communication was left to peripheral individuals who were delegated that task. Senior management participation in the communications was minimal. Often the communication of strategic plans by division employees was misleading and confusing for two possible reasons: the communicators did not thoroughly understand the programs and the proposed functioning, and the communicators may have embellished the objectives of the plans with their own personal values and objectives. It was clear that there were differences in expectations of the outcomes of the Ethics Program between respondents in the planning group who were close to the development of the program and the respondents of the cultural group who received information about the program third or fourth hand. The differences in expectations is probably the result of incomplete and inconsistent communication of the details of the programs.

Many of the programs implemented by Electronics Division, in the opinion of the cultural group, were implemented because they were ordered by corporate executives and not because they were priorities with senior division managers. Planning and goal setting at the division level was more a ritual game of satisficing than an exercise in directing the organization. Therefore, there was little consideration given to the fit between the plans

of the organization and the beliefs, values, and practices of the members of the organization. While Electronics Division should have been an integrated culture, defined by Earnest (1985) as oriented toward problem solving, or an entrepreneurial culture, defined by Earnest as oriented toward product development, to handle the implementation of its plans, the division was actually more of a systematized culture which is characterized by a reactive management style and nonparticipative employees. Electronics Division was focused on routine work, operating procedures, and external regulations also characteristic of a systematized culture. The introduction of the MRP II system, for example, although implemented according to recommendations specified by Melnyk and Gonzales (1987) regarding record accuracy and technical support, was not supported by other appropriate cultural conditions: cooperation among Engineering, Production, Material, and Marketing departments, standardized information, and limitations on status reporting such as shortage reporting.

While Electronics Division had some elements of the appropriate cultural conditions, there was no consistent cultural orientation to support the various programs. In fact, some of the programs seemed to require cultural conditions that conflicted with those required by other programs. The majority of program development was normally conducted at Corporate Headquarters by specific individuals assigned to that task. If major programs were in

development at the same time, different individuals worked on the different programs and did not coordinate with each other to determine whether or not the cultural conditions necessary for implementation were conflicting. Further, the program developers rarely, if ever, determined what sort of cultural conditions were necessary and if they were different from existing conditions.

Presumably, the program crusaders who were assigned to implement the program within the divisions had some understanding of the cultural conditions within the division. But the organizational noise apparent in the results of this study indicated that the crusaders assigned to carry out the program within the division may have been more strongly influenced by parochial priorities of senior managers than by cultural conditions.

Managers at Electronics Division tended to choose a view of the future and then go look for supporting data. Perceptions of the organization and its direction were generally not influenced by what employees wanted or felt about the organization. The supporting data were usually presented in status reports that were created to support the intention of the objective and not to represent the actual state of the organization. In other words, the charts usually indicated progress toward objectives that was not actually present in the organization. Planning at Electronics Division was used primarily to reduce anxiety

about the future and to give senior managers the illusion of control.

A meaningful assessment of the relationship of the changes in the company and the strategic objectives must include an assessment of what has not changed. The elements of the strategic plan that allude to company managers' responsibility to provide an environment that respects the rights and dignity of the workforce, to provide human resource programs that emphasize training, and to be sensitive and responsive to the diverse needs of the workforce have not apparently resulted in any identifiable changes at Electronics Division. Although the Ethics Program was intended and expected to bring about such changes, it has proven to be an inadequate vehicle.

That is not to say that senior managers at Electronics Division have not taken action to implement the objectives of the Ethics Program, but the action has generally been ineffective or inappropriate. A common organizational analysis approach to the situation would be to condemn senior division managers as incompetent. But senior managers at Electronics Division, as well as in other areas of the corporation, are not necessarily to blame for the lack of humanistic change. The reward systems to which they operate would, by themselves, eliminate the possibility of the sort of humanistic changes that employees seemed to expect. Managers were rewarded for their achievement of specific financial and performance goals, and not for their

congeniality. When production goals have to be met, sometimes managers order employees to work harder or longer even if the employees think that is unfair. Planning systems in place at General Dynamics tended to support some planning objectives with appropriate reward incentives, but they also tended to leave other objectives with little or no appropriate support system.

For example, the training program at Electronics Division required 20 hours per year of training for all hourly employees, 30 hours per year for all salaried professionals, and 40 hours per year for all supervisors and managers. This program, which required a considerable commitment of division resources (perhaps as much as \$1.5 million per year), was an obvious implementation of a corporate strategic objective to develop and train employees. The program did not specify what the training should be for; the individual departments and supervisors were left with that decision. The senior managers only reviewed charts that indicated how many hours each department had spent in training. Managers were evaluated on whether or not they met their targets of the number of hours of training, but were not evaluated on whether or not that training did them any good.

A manager operating within engineering cultural framework relies on the assumption that a machine that has been properly designed will function properly. There is little or no thought given by the engineer to the practical

or social implications of that machine's operation. The problem for the manager from an engineering cultural perspective is to design an organization to meet the specifications of operation. The training program mentioned above was designed to solve the problem of meeting the strategic training objective by providing time commitment specifications and resources, but it was not designed to make the training meaningful to the people involved or, ultimately, to meet the needs of the organization.

Meaningful understanding of the diverse needs of the workforce would require face-to-face interaction among the people in the organization. A good engineer knows that maintenance of a machine is both expensive and inefficient if the technician has to constantly check each component of the machine. Therefore, the good engineer will construct remote monitors so efficient operation of the machine can be checked without direct contact with all the components. Most of the senior managers in Electronics Division, as well as throughout the corporation, have been promoted because of their engineering skills. Therefore, the most prevalent rituals among managers are status reporting rituals which are designed to monitor the detailed operation and performance of the organization without requiring contact with any but a few of the people in the organization.

Not surprisingly, the senior managers in the division who do not have engineering backgrounds have tended to criticize the common methods of status reporting as too

expensive and inefficient, and not conducive to human relations or direct communication. The engineering cultural orientation tends to exclude contact between senior managers and employees to the extent that most senior managers have little or no idea what the diverse needs of the employees are, and much less how to address them.

Close analysis of the change process at Electronics Division supports the conclusion that the engineering culture has not been modified sufficiently to accommodate the strategic objectives involving human resources goals. This analysis also suggests that until there is a decisive and direct effort to change the conflicting basic assumptions of the two cultural orientations in the organization, there will probably be no change in the work environment in the directions implied by the strategic objectives, and the planning process will be only partially effective.

The Effectiveness of the Ethics Program

The third research question must be answered in two parts: the first part addressing the specific objectives of the Ethics Program, and the second part addressing the broader goals of the Ethics Program. The question must be answered in two parts because there appears to be two separate answers: General Dynamics was successful in achieving the specific objectives of the Ethics Program, but unsuccessful in accomplishing its broader goals.

The specific objectives of the Ethics Program can be characterized by the actual standards listed in the handbook. The Ethics Program was designed to address an immediate problem of behavioral improprieties that resulted in both deliberate and unintentional misuse of public funds and violation of public trust. Because investigations uncovered the fact that most reported violations were either unintentional or previously acceptable ways of doing business that were no longer acceptable, the program's specific objectives were to make the rules clear to employees and to emphasize the importance of following the rules. Ethics Program developers did not appear to have assumed that deliberate wrongdoing was prevalent in the organization.

Even though interview respondents suggested a reluctance to blow the whistle if they encountered some wrongdoing because it might come back to hurt them in some way, evidence suggests that the amount of wrongdoing, both intentional and unintentional, has diminished substantially. Numerous check and balance systems have been established to flag violations of the standards. The wrongdoing discussed during the interviews tended to focus on unfair treatment and not on law breaking. Employees are certainly aware of the standards and the consequences of not meeting the standards. From a standpoint of following the rules, General Dynamics has become an ethical organization.

The second part of the question of success of the Ethics Program has to do with the broader goals implied by the presentation of the program to employees. The broader goals of the program implied by the introductory sections of the handbook were to make the work environment more conducive to individual dignity and mutual respect, and to promote fair treatment of employees by their managers and supervisors. The evidence suggests that these broader goals were not met, and some of the interview respondents were willing to characterize the organization as unethical because it had not met these broader goals.

The first issue of discussion is whether the Ethics Program was intended by its creators to actually meet these broader goals, or if the concept of mutual respect and fair treatment was used as a tool to promote the program. Because humanistic treatment is consistent with most people's idea of ethical behavior, the elements of humanism may have been included more as supportive framework for the program rather than as its actual goals. It is entirely possible that the humanistic language of the handbook was a sales ploy to encourage people to follow the rules.

All programs examined during the course of this study have been accompanied by some sort of sales package. The Ethics Program was sold to employees using two arguments: being ethical is good business, and being ethical will enhance the quality of work life. Both arguments have substantial emotional and intellectual appeal to the target

audience. All employees interviewed recognized that the Ethics Program was necessary to ensure the financial well-being of the company. Since most employees at Electronics Division were concerned about their job security, the appeal of this concept is obvious. Survey data revealed that most Electronics Division employees felt that the quality of work life within the organization was generally less than satisfactory, therefore the appeal of this argument is also easy to understand.

The second issue of discussion is whether or not the use of this selling technique for the Ethics Program was appropriate. There is no obvious criticism of the technique used to sell the Ethics Program except that it seemed to have raised employees' expectations unrealistically. A program such as the Ethics Program cannot realistically be expected to make quality of work life improvements that are not specifically related to the standards. And none of the standards specifically require the fair and humanistic treatment of employees by supervisors. Not only would fair and humanistic treatment be impossible to define, but any definition would be undesirable in situations where supervisors are pressured to ask employees to do some "dirty work." For example, one employee might consider a request to work overtime to meet a schedule a fair and reasonable request while another employee might not.

Most important issues of fairness and treatment of employees are covered by local, state, and federal laws and

the programs that General Dynamics has implemented to abide by the laws, such as the Equal Employment Opportunity Program. When Ethics Program creators compiled the handbook, they most likely assumed that employees would use existing grievance procedures and programs and that the globular statements of humanistic treatment would simply communicate the senior executives commitment to supporting those programs. The broader goals of the Ethics Program as understood by respondents were probably not intended by program creators as measurable objectives, but rather as general attitudes.

The arguments used to sell the Ethics Program probably should have been qualified by statements of limitations. Even though senior executives may not have actually expected humanistic treatment to supersede organizational tasks and priorities that enhanced the company's ability to conduct business, employees at lower levels of the organization clearly expected fair treatment to become their supervisors' number one priority as a result of the Ethics Program.

Aside from answering the specific research questions, the Ethics Program can be evaluated by using the models explored in Chapter Two. The implementation of the Ethics Program can be evaluated using the factors developed by Franklin (1976) which are characteristic of successful changes. Innovation is an important identity factor at General Dynamics, but the innovation that General Dynamics usually undertook was primarily in technological areas, not

in human resource areas. The company executives did contact external agents prior to implementing the changes envisioned by the Ethics Program. The program focused on specific rather than general problems, and used survey feedback as one method of self-evaluation. Top corporate managers were very visible in their support of the program and their commitment to its success. The changes were part of a total development effort and were scheduled for completion in less than four years from development. And, the internal change agents were carefully selected. Based on these criteria, the Ethics Program essentially followed the pattern of successful change efforts.

However, both Dunn and Swierczek (1977) and Friedlander and Brown (1974) might have predicted that the Ethics Program would not be successful because it was a directed change rather than a participative change. In addition, General Dynamics tended to follow a pattern for unsuccessful change articulated by Phillips (1986): The CEO decided to commit to a new strategy, proceeded to change the organization in a manner consistent with the new strategy, announced and publicly supported the proposed changes, but then withdrew to let the division managers take over. Normally, according to Phillips, this pattern results in the change rapidly disintegrating because there is no mechanism for coping with parochial priorities, habitual behavior, and current distributions of power and influence. However, at General Dynamics, it is likely that the potentially

detrimental effects of this pattern were offset by the recognition on the part of the general managers that the change was necessary to the survival of the organization and, therefore, they subsequently committed their full support.

The organization did meet most of the six criteria of successful change suggested by Phillips: (1) communication of what needed to be changed at all levels of the organization, (2) early demonstration of new methods of operation, (3) appropriate changes in standard operating procedures, (4) the highly visible role of the CEO for extended periods of time, (5) the continuous emphasis placed on the positive aspects of the program through rewards and incentives, and (6) the change becoming the agenda of senior managers. The only two criteria that may not have been met, according to survey and interview results would be the fifth and sixth criteria. The underlying assumption that appeared to have accompanied the implementation of the program was that if employees knew the right thing to do, they would do it. Senior managers in the company depended on the personal pride and sense of morality of the employees to motivate them to change, and backed the intended changes by the real threat of discipline if they did not. Interview results indicated that some respondents doubted whether senior division managers had actually made ethical behavior a part of their agenda. In defense of the senior managers, there is little doubt that they made, at least, the appearance of

ethical behavior a part of their agenda. However, although the CEO was perceived by respondents to personify the norms and values targeted by the Ethics Program, the division senior managers were not.

General Dynamics Corporation in general and Electronics Division in particular have done a good job of structuring the goals and objectives of the organization to reinforce the rules and standards of the Ethics Program. It was clear to all employees questioned during the course of the study and many more encountered during my normal work day that when an employee of General Dynamics acts on behalf of the company, he or she must follow the standards specified in the ethics handbook. The broader goals of the Ethics Program to foster human decency and mutual respect have not been so clearly supported by the results.

Recommendations For Further Research

The present study was severely limited by time, resources, and access. It would certainly have been more meaningful if more divisions were included. Comparison of the cultural assumptions in different divisions which were more oriented toward human relations than Electronics Division would have been most instructive.

Logistics and cost limitations prevented me from exploring the actual motivations of the senior executives in General Dynamics who were responsible for the actual development of the Ethics Program. Future research should

be designed to include an assessment of the thought processes that result in the packaging of such a program for consumption by employees. It would be instructive to know if Stan Pace actually intended the broader goals that were implied by the communications from him.

More research is needed in the assessment of how large structural changes are affected by their trip down the chain of command. Regardless of what Stan Pace intended, the program was presented to employees by corporate and division communicators with their own agendas, values, and priorities. And more research is needed into the translation of symbolic action into collective action by members of large, complex groups. I would suggest that future research focus on comparisons of large and small organizations. Based on my findings, I would expect employees in smaller organizations to exhibit more realistic expectations of an ethics program's objectives.

Larger organizations may be too complex to be easily characterized by consistent trends of thought and behavior. It is entirely possible that what appears to be a single large organization is really a multitude of small organizations. The focus of the present research was on a relatively large and diverse organization. Future research might be more informative if it examined the longitudinal change within a smaller, more stable group (less than 100 employees).

Future research should also be directed at the seemingly prevailing conflict between the need for profits and human resources needs. This particular issue has not been adequately defined or explored. My impression has been that nearly all research in human resources areas has been befuddled to some extent by this conflict.

Conclusion

General Dynamics managers embody at least two conflicting sets of cultural assumptions and values: military and engineering. Both of these cultural orientations characterize people as usable and disposable objects and are inconsistent with the social values associated with assumptions of the sanctity of life and the infinite worth of human beings which are the end values one can suppose from the objectives of the strategic plan and its implementation vehicle.

The most significant source of negative feelings in the respondents discussed through the course of this study seems to have been the intrinsic conflict encountered by any business that attempts to adopt a higher level of social consciousness while still trying to make a profit. In addition to the natural conflict of trying to compete while following rules that competitors do not necessarily follow, there was a serious and potentially dysfunctional conflict between different and distinct sets of organizational values and basic assumptions. These conflicting cultural values

can point the organization in conflicting directions and exert pressure on organizational members to conform to conflicting behavioral standards.

Because the level of employee participation in planning and decision making was very low within the division, senior division managers rarely had the opportunity to get a feel of the actual workings of the organization. In addition, employees were left on their own to guess what values and assumptions had been applied to what decisions. Because the process of decision making was kept strictly secret from the rank and file and because the decisions themselves were rarely announced until the last possible moment, employees felt little or no loyalty to division managers and no particular obligation to follow their decisions.

Employees understand clearly that their business role is separate from their social responsibility and that socially responsible action is not cost effective (Ackerman, 1973). But employees also understand that breaking the rules can lead to a withdrawal of the legitimacy of the organization by the nesting society. Although the standards imposed by the Ethics Program were certainly incorporated into organizational goals, high level decision making, and long range planning, for many employees in the division they were not as pervasive in operating plans, day-to-day decision making, and coordination of activities. General Dynamics tended to treat social responsibility as an environmental factor and was concerned primarily with

adaptation--change for business reasons and not because it is the socially correct thing to do.

Despite the clear communication of the standards, it was commonly recognized among study participants that whistleblowing was still considered undesirable social behavior by those who had the power and influence to create negative outcomes for the whistleblower. Rather than report many potentially unethical behaviors, employees would probably force themselves to be apathetic, a condition which could seriously affect the performance of the organization. The Ethics Program was incomplete in that it did not include a supportive system for encouraging whistleblowing and protecting the whistleblowers.

The dilemma is not an easy one to resolve. The company must do the right thing by society or face losing its existence. On the other hand, the company must compete successfully for business or face the same end. General Dynamics undertook a bold, albeit forced, measure to adopt the Ethics Program. The program consumed a considerable portion of the company's resources. In addition to taking the time and energy of many of the company's key employees, the cost easily topped five million dollars during the three year period of the study for development, communication, and training. In return, the company had won back a good deal of lost public and customer confidence.

The Ethics Program at General Dynamics appeared to have incorporated two separate and mutually exclusive ethical

philosophies. The first philosophy was used to develop the standards, and was based on the assumption that there is an ultimate, absolute, and categorical truth to which rules can be applied. The result of the application of this philosophy was an expectation of absolute conformance to the rules, and the assumption that all moral problems can be resolved with a correct answer. The answer to any moral dilemma should be able to be presented to any reasonable forum and receive a consensus. The limitation of this philosophy is the limitless exceptions that the rules must accommodate. Company executives planned for implementation of this philosophy by holding training sessions for all employees. The training sessions were supposed to provide employees with tools and techniques for grappling with the exceptions.

The second philosophy was used to present the merits of the program and sell it to employees, and was based on the assumption that right behavior benefits the greatest number of people. The result of the application of this philosophy was an expectation that the program would ultimately benefit all concerned. The company presented the program as the right thing to do because all employees would profit from the long term effects of the program by keeping their jobs, and the community of taxpayers would benefit by the receipt of quality products at fair prices. It is this philosophy that most likely led to employees' expectations that their quality of life should improve as a result of the program.

The inherent conflict between a categorical imperative and a utilitarian ideal has led to confusion among employees and executives over what the program can ultimately be expected to do. Presenting a program that promotes moral behavior because it is a good business practice implies that rules should be followed because the rule follower can achieve a personal gain. If right behavior has reward as its ultimate goal, then one may be justified in discontinuing the behavior if the reward is not forthcoming. The conflict between philosophies manifests itself in a choice between behavior that will increase profits and behavior which is altruistic.

Ultimately, the organizational noise is created by those who have adopted the reward incentives, but do not feel they have received the reward. Simply being able to keep one's job is not, apparently, sufficient reward. Employees tend to expect a higher quality of life on the job. Upon implementing an ethics program, organizations must choose whether to promote the program as a categorical imperative, that the law is the law, or whether it is, or should be, an integral part of community life and entwined within the culture of the organization. If the program is presented as a categorical imperative, then the General Dynamics Ethics Program is an appropriate model. If the program is desired by executives to improve community relations within the organizational community, then the

changes must be broader and more profound than those accomplished by the General Dynamics program.

The process of gathering data in an organization that has historically been extraordinarily sensitive to the release of information to anyone who might release that information to the outside world was fraught with frustrations and peril. I would not have been able to conduct this study to the depth that I did if I were not a long term, and reasonably trusted employee. To some extent, I am sure that I violated that trust in the eyes of certain individuals who characteristically feel that nothing negative should ever be reported about them or their actions.

The study would have taken a different flavor entirely if it were conducted by persons from outside the organization for two reasons: they would not have been biased by a history of personal experience with the organization and its members, and they would not have had the insight into many small but meaningful actions and events that is gained only through extensive experience with the organization and its members.

I feel the conclusions I have reached are valid to the extent that they support my experience as a long time employee. Although it would be presumptive to present these conclusions as generalizable to other organizations because of the limitations inherent in the data, I cannot help but feel that my experience of certain organizational processes

are consistent with those of other people in other organizations. I would imagine that conflicting cultural values within one organization are the rule rather than the exception. The miscommunication of program objectives, the misunderstandings of those communications, and the unrealistic expectations that tend to characterize the hope of every person for a better life are present everywhere. The Ethics Program at General Dynamics was seen by employees as the potential means to a better future. It was presented to them that way. Is that not the hope that people have for every community program?

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APPENDIX B

April 1983 Survey

1. What is your idea of the function of the following departments:
 - a. Production Scheduling
 - b. Program Control
 - c. Production Control
2. What are the strengths of those three departments?
3. What are the common problems?
4. What are the interface problems?
5. What duplications of effort do you think exist?
6. What needs are not satisfied?
7. What suggestions do you have for improvement?

APPENDIX C

June 1989 Survey

EMPLOYEE SURVEY
MATERIAL DEPARTMENT

PLEASE ANSWER ALL QUESTIONS BY PLACING AN X OVER YOUR CHOICE. DO NOT PUT YOUR NAME OR ANY OTHER IDENTIFYING MARKS ON THE PAPER. WHEN YOU ARE THROUGH, PLACE SHEET IN THE ENVELOPE PROVIDED AND SEAL IT.

1. HOW GOOD A JOB IS BEING DONE BY THE GDE GENERAL MANAGER?
1-VERY GOOD 2-GOOD 3-SO-SO 4-POOR 5-VERY POOR
2. HOW GOOD A JOB IS BEING DONE BY THE DIRECTOR/VP OF MATERIAL?
1-VERY GOOD 2-GOOD 3-SO-SO 4-POOR 5-VERY POOR
3. HOW GOOD A JOB IS BEING DONE BY YOUR IMMEDIATE SUPERVISOR?
1-VERY GOOD 2-GOOD 3-SO-SO 4-POOR 5-VERY POOR
4. ALL IN ALL, MY DIVISION IS AN EFFECTIVELY MANAGED, WELL RUN ORGANIZATION.
1-STRONGLY AGREE 2-AGREE 3-NEITHER 4-DISAGREE 5-STRONGLY DISAGREE
5. DECISIONS HERE ARE USUALLY MADE WITHOUT UNDUE DELAY.
1-STRONGLY AGREE 2-AGREE 3-NEITHER 4-DISAGREE 5-STRONGLY DISAGREE
6. MANAGEMENT WHERE I WORK CHANGES THEIR MIND SO OFTEN ABOUT WHAT IT WANTS, THAT IT SERIOUSLY INTERFERES WITH GETTING THE JOB DONE.
1-STRONGLY AGREE 2-AGREE 3-NEITHER 4-DISAGREE 5-STRONGLY DISAGREE
7. HOW WOULD YOU RATE GDE ON HAVING A CLEAR SENSE OF DIRECTION?
1-VERY GOOD 2-GOOD 3-SO-SO 4-POOR 5-VERY POOR
8. THE WAY WE ARE ORGANIZED AND STRUCTURED IN MY PART OF THE DIVISION IS WELL SUITED TO THE WORK BEING DONE.
1-STRONGLY AGREE 2-AGREE 3-NEITHER 4-DISAGREE 5-STRONGLY DISAGREE
9. I UNDERSTAND PROMOTION POLICIES FOR EMPLOYEES LIKE ME.
1-STRONGLY AGREE 2-AGREE 3-NEITHER 4-DISAGREE 5-STRONGLY DISAGREE
10. I HAVE RECEIVED ENOUGH FEEDBACK FROM MY IMMEDIATE SUPERVISOR.
1-STRONGLY AGREE 2-AGREE 3-NEITHER 4-DISAGREE 5-STRONGLY DISAGREE
11. IF CONDITIONS WERE CHANGED WHERE YOU WORK, HOW MUCH WOULD YOU SAY YOU COULD PERSONALLY IMPROVE YOUR PERFORMANCE?
1-A GREAT DEAL 2-QUITE A BIT 3-SOMEWHAT 4-A LITTLE 5-NONE
12. HOW DO YOU FEEL ABOUT THE AMOUNT OF WORK YOU ARE EXPECTED TO DO?
1-MUCH TOO MUCH 2-TOO MUCH 3-RIGHT 4-TOO LITTLE 5-MUCH TOO LITTLE
13. HOW WOULD YOU RATE GDE ON HAVING A COOPERATIVE ATMOSPHERE, I.E., VARIOUS DEPARTMENTS WORKING WELL TOGETHER?
1-VERY GOOD 2-GOOD 3-SO-SO 4-POOR 5-VERY POOR
14. HOW DO YOU FEEL ABOUT THE EMPHASIS ON CORRECTING POOR EMPLOYEE PERFORMANCE WHERE YOU WORK?
1-MUCH TOO MUCH 2-TOO MUCH 3-RIGHT 4-TOO LITTLE 5-MUCH TOO LITTLE

APPENDIX D

February 1989 Engineering Survey

Please check the appropriate box:

☐ Director	☐ Section Head	☐ Lead	☐ Other
☐ Manager	☐ Supervisor	☐ Engineer	

- Does your supervisor regularly report to you with information on the following:

☐ Division Staff Meetings	☐ Major Policy Changes
☐ R&E Staff Meetings	☐ Programmatic Developments
☐ Organizational Changes	

 If so, is it reported in a timely manner? ☐ Yes ☐ No
- Do you regularly read:

☐ The Current	☐ NMA IMAGE
☐ GD World	☐ CRA Newsletter
- Have you ever utilized these media as a forum for personal expression, i.e. letters to the editor?
 ☐ Yes ☐ No If yes, how often? _____
- Do you consider communications improvement suggestions during your daily work routine?
 ☐ Yes ☐ No

How many of these suggestions have you submitted to your supervisor (approved or unapproved) within the past year? _____
- Are you cognizant of the following important phone numbers within the division and/or Corporation:

☐ Ethics	☐ Security	☐ Safety	☐ Job Opportunities
---------------------------------	-----------------------------------	---------------------------------	--

 How many times have you used them within the past year? _____
- Which of the following sources of information do you feel are routinely displayed or accessible within your department:

☐ GD Daily News Summary	☐ Union Announcements
☐ NMA Flyers	☐ Special Activities Posters
☐ Division "Standard Distribution" memos	☐ CRA Newsletter
☐ Job Postings	☐ Training/Course Opportunities
	☐ Labor Accounting Updates

"Employees indicate there is insufficient feedback to and from their immediate supervisor on division and Company information, and insufficient effort by management to get employee ideas on work matters."

*Sirota and Alper Associates Inc.; 1986 Survey of Employees
GD World, Special Corporatewide Edition, July 1987*

- Do you believe the above paragraph to be true today? ☐ Yes ☐ No

If yes, has the situation: ☐ Improved ☐ Degraded ☐ Remained Unchanged

Higher management in my division doesn't want to hear about problems - they just want "good news."

- Do you believe the above paragraph to be true today? ☐ Yes ☐ No

If yes, has the situation: ☐ Improved ☐ Degraded ☐ Remained Unchanged
- Do you submit activity reports to your Supervisor, both positive and negative? ☐ Yes ☐ No

If yes, ☐ written or ☐ verbal?
- How would you rate the effort made by management to get the ideas and opinions of employees like yourself? ☐ Good ☐ So-so ☐ Poor
- Are you aware that Phase II of the General Dynamics Employees Survey will be conducted in September 1989? ☐ Yes ☐ No

APPENDIX E

Planning Group Interview Guide

1. What do you think was the main reason for implementing the Ethics Program at General Dynamics?
2. What are the objectives of the Ethics Program?
3. Do you feel the Ethics Program has been effective? Successful?
4. How can you tell whether or not the Ethics Program is successful?
5. How long does General Dynamics intend to carry out the Ethics Program?
6. Do you think the Ethics Program was properly planned and executed? In retrospect, how would you have changed it?
7. Has there been any resistance to the program? How and by whom?
8. Was resistance to the program planned for? How?
9. How successful has GD been in maintaining the changes intended by the Ethics Program?
10. Would you consider GD innovative?
11. Has the company changed in the past three years? How?

APPENDIX F

Cultural Group Interview Guide

1. How is this organization different from what it was a few years ago?
2. If there are any differences, to what do you attribute them?
3. Who determines how things get done around here?
4. How does this person (group) actually make things happen?
5. Who solves the problems? How?
6. Do you see a need for changes in this organization? What?
7. How do you know when someone is really interested in doing a good job?
8. How do you know whether or not you are doing a good job?
9. What reasons, other than money, keep you working here?
10. Who do you think is a good example of the kind of employee you would like to be? Why?
11. What is your favorite story about the company that you would tell someone at a party?
12. Do you think upper management is trying to do the right thing for employees?

APPENDIX G

Interview Consent Form

I, the undersigned, agree to participate in a study of organizational change and organizational culture at General Dynamics conducted by Rick Barker.

I understand that I may be interviewed more than once, but I reserve the right to refuse to answer any questions I consider inappropriate or to cease my participation at any time.

I further understand that I will not be identified by name in the final report, and that no direct quotations of my comments nor any specific answers that I give will be attributed to me. I understand that no one but Rick Barker will know what I have said specifically.

Signed_____

Date_____

APPENDIX H

Standards of Ethics and Conduct Handbook

**General Dynamics
Standards of
Business Ethics
and Conduct**

Second Edition

"We are dedicated to achieving in our administrative performance the same high level of excellence which we have historically achieved in engineering and manufacturing."

GENERAL DYNAMICS
A Strong Company For A Strong Country

16/97

GENERAL DYNAMICS
Electronics Division

Info
HELP
Lines

- EMPLOYEE BENEFITS
573-7083
- EMPLOYEE SUGGESTION PROGRAM
573-5045
- EQUAL EMPLOYMENT OPPORTUNITY
573-5310
- ETHICS HOTLINES
Available 24 Hours a Day...7 Days a Week
573-5384 - Division
1-800-433-8442 - Corporate
- LABOR ACCOUNTING
573-5024
- OMBUDSMAN HOTLINE
Employee Concerns
573-5600
- SAFETY
573-5911
- SECURITY HOTLINE
573-7815
- WORKER'S COMPENSATION
573-7085
- CORPORATE OFFICE ETHICS PROGRAM
P.O. BOX 50263
CLAYTON, MO. 63105

DEAR FELLOW EMPLOYEES:

This booklet is written to help. It contains useful guidelines for daily business conduct. It also tells how to get assistance if you have questions or concerns about the Standards of Business Ethics and Conduct.

This new edition of the booklet has been updated and improved based on what we heard from you through Ethics Awareness Workshops, the Employee Surveys, and communications with the Ethics Program Directors. The Standards remain unchanged in substance except for some points of clarification in meaning, the addition of two new Standards, and the modification of one other. The new Standards are (1) Safety and Health and (2) Proper Use of the Ethics Program. The modified Standard is Suppliers and Consultants, which now permits the acceptance from suppliers of unsolicited promotional items of trivial value providing acceptance does not constitute a conflict of interest in either appearance or fact. The material on Our Responsibilities has been clarified and enlarged.

The Standards contained in this booklet are like roadsigns. They give directions in areas of daily business activity where possible problems of conduct could occur. Some Standards such as Time Card Reporting, Quality and Testing, Security, and Company and Customer Resources involve all or most employees of General Dynamics. Other Standards such as Antitrust or International Business likely involve only some employees. Some Standards involve ethical issues directly and the Standards state what conduct is acceptable or unacceptable. Other Standards involve safeguards put in place to avoid either the fact or the appearance of misconduct. All Standards, however, are important to administrative excellence.

Every employee has a role to play in upholding the Standards. The Standards depend on the sense of honesty, fairness and integrity brought to the job by all employees. Our values as individuals, applied to everything we do on the job, help determine what the values of General Dynamics are perceived to be. Our values are the values of the company.

In the first two years, the implementation of the Ethics Program has made significant progress. The program has already had an important impact on strengthening our administrative performance and on improving our image as a company with our customers and the general public. But the challenge continues, and without an ongoing effort, the progress that has been made could be easily lost. We are determined to maintain the high standards of conduct set by these Standards and we believe you share that determination. We urge you to remain thoroughly familiar with the contents of this booklet and we encourage you to seek assistance when a question or concern arises to which there appears to be no immediate answer.

The employees of General Dynamics have demonstrated repeatedly what is the right conduct. We believe the future of General Dynamics depends not only on the skills, abilities and commitment of all employees but also on their continued goodwill, judgment, self-discipline, common sense and integrity. Thank you for your contribution to the success of General Dynamics. We share your pride in our company's accomplishments and look forward to a strong future.

Stanley C. Pace, Chairman

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OUR MISSION

General Dynamics is a company of talented, dedicated and resourceful people who share a responsibility to provide the highest quality products for the benefit of the United States and the Free World.

General Dynamics develops, produces and supports innovative, reliable and highly sophisticated systems and diverse military and commercial products to keep our nation technologically strong in every environment from undersea to outer space. These programs consistently evolve as the foundation for the next generation of technical advancements.

As a leading engineering-based manufacturer, we bring together a wide variety of technical and business concepts to provide cost-efficient production programs which uniquely satisfy our customers' challenging requirements.

OUR COMMITMENTS

There are five key relationships in the business of General Dynamics. These relationships involve customers, suppliers, fellow employees, shareholders and the communities in which we operate. All employees participate in one way or another in these key relationships. The following commitments serve as broad ideals for shaping these relationships.

- To our customers we will be attentive and strive to maximize the value, quality and operability of General Dynamics products and services within the requirements of our contracts.
- To our suppliers we will be the best customer we can be and will emphasize both fair competition and long-lasting relationships.
- To each other, as employees, we will treat one another fairly and with the dignity and respect due all human beings.
- To our shareholders we will pursue our growth and earnings objectives while always keeping ethical standards at the forefront of our activities.
- To the many communities of which we are a member, and to society as a whole, we will act as responsible and responsive corporate citizens and in a moral, ethical and beneficial manner.

OUR VALUES

In order to fulfill these commitments, it is important for all employees to be:

- Dedicated and loyal to our company and to our country,
- Law-abiding,
- Honest and trustworthy,
- Responsible and reliable,
- Truthful and accurate,
- Fair and cooperative,
- Economical in utilizing company and customer resources.

OUR RESPONSIBILITIES

The Company

Under these Standards, the company is responsible for:

- implementing the Ethics Program,
- distributing the General Dynamics Standards of Business Ethics and Conduct contained in this booklet to all employees,
- providing all employees with clear guidelines on matters of everyday business conduct,
- making sure through established educational and training programs that all employees are aware of and understand the Standards,
- providing continuing counsel on company rules and regulations to any employee who seeks it,
- maintaining working conditions at all locations supportive of employee responsibilities under these Standards,
- enforcing compliance with the Standards,
- recognizing employees who make an exemplary effort to implement and uphold the Standards.

Supervisors

Under these Standards, all levels of supervision have a special responsibility for the implementation of the Standards of Business Ethics and Conduct and will be measured in their performance for:

- assuring that all current and new employees under their supervision receive a copy of the Standards of Business Ethics and Conduct and are trained in its meaning and application,
- reviewing the knowledge and understanding of this booklet by employees under their supervision and ensuring that "refresher" programs are provided as necessary,
- stressing to all employees in word and deed the need for a continuing commitment to the Standards,

- demonstrating their own commitment by conducting themselves and managing their departments and the activities of all employees under their supervision in accordance with the Standards,
- maintaining a workplace environment that encourages frank and open communication, free of the fear of reprisal, concerning the upholding of the Standards.

All Employees

Under these Standards, all employees, regardless of rank or station, are responsible for:

- reviewing regularly their knowledge and understanding of the Standards,
- upholding the Standards and the policies, procedures, and practices that support them as demonstrated by their daily business conduct,
- contributing to a workplace environment that is conducive to the maintenance of the Standards in daily business activities,
- seeking help when the proper course of action is unclear or unknown,
- remaining alert and sensitive to situations which could result in actions by any employee that are illegal, unethical, in violation of the Standards or the policies and procedures that support the Standards, or otherwise improper,
- counseling fellow employees when it appears they may be in danger of violating the Standards or company policies and procedures,
- reporting violations of the Standards to those to whom responsibility for discipline has been assigned.

Specific ethical responsibilities of employees should be clearly defined by the company in education and training programs. Any employee still in doubt about his or her responsibilities should feel free to seek additional counsel from his or her supervisor or any Ethics Program Director.

ETHICS PROGRAM ORGANIZATION

The Standards of Business Ethics and Conduct are the centerpiece of the General Dynamics Ethics Program. The aim of the Ethics Program is to integrate these Standards into the daily business activities of the company.

To help fulfill this aim, the Board of Directors has established the Committee on Corporate Responsibility to review and approve Ethics Program policy and the effectiveness of the Ethics Program. The Committee establishes the requirements for management to report on the implementation of the program. The Committee consists entirely of outside Directors of the Board.

The Chairman and Chief Executive Officer has created the Corporate Ethics Steering Group to assist management in the implementation of the Ethics Program. The Steering Group is available to review recommendations on policies, procedures and practices pertaining to the Ethics Program. The Steering Group consists of corporate leaders of various functional departments including Legal, Human Resources, Internal Audit, Contracts and Pricing, International Office and Controller. It is led by the Corporate Ethics Program Director and assisted by the Corporate Vice President for Human Resources who is responsible for implementing training and education pertaining to the Standards and the Corporate Vice President-General Counsel who is responsible for appropriate legal guidance under the Standards and for interpreting applicable laws, regulations and government orders.

Ethics Program Directors are installed at corporate headquarters and at each division or subsidiary to assist management in the implementation of the Ethics Program. An important part of every Ethics Program Director's job is to establish and maintain open channels of communication for all employees at each location. Ethics Program Directors provide information and advice to employees who have questions or concerns about the meaning or application of the Standards. The individuals serving as Ethics Program Directors report

directly to the head of their local organization and have a functional responsibility to the Corporate Ethics Program Director.

Attorneys at the Corporate Office and at each division support the Ethics Program by providing guidance, support and counsel pertaining to the Standards and by reviewing and interpreting, any applicable laws, regulations and government orders.

OUR STANDARDS

Conflicts of Interest

"A conflict between the private interests and the official responsibilities of a person in a position of trust."

As employees we should all consider ourselves as persons in positions of trust and conduct ourselves accordingly. We must be particularly sensitive to the many situations, on and off the job, where a conflict of interest or even a perception of such a conflict could originate. Such conflicts could involve customers, suppliers, present or prospective employees, shareholders, or members of the communities in which we operate.

Gifts, Gratuities and Entertainment to Customers

As a company, our continuing objective is to provide our customers with the highest quality product at the best possible price.

It is a serious violation of our Standards for any employee to seek a competitive advantage through the use of gifts, gratuities, entertainment or other favors. Under no circumstance may we offer or give any item of value to a customer or a customer's representative in an effort to influence a contract award or other favorable customer action. It is General Dynamics policy to compete solely on the merits of its products and services.

In some foreign countries, customs require the exchange of gifts. In cases where it is desirable to meet such a requirement, the company will provide the gift; any gifts received will become company property.

Inside Information

In no instance may we as employees ever use or share inside information, which is not otherwise available to the general public, for any manner of personal gain as might be realized, for example, through trading in the stock of our company or any other company.

Outside Interests

A conflict with the interests of General Dynamics can arise when an employee holds a material investment interest in or is an official, director or employee of another enterprise, particularly if that enterprise is a supplier of products or services to the company. While such circumstances are not automatically prohibited, they are not desirable, and must not be entered into or exist without prior written disclosure to and approval by the company.

Former Government Employees

The company has clear written policies and procedures which govern the conditions of employment of former U.S. Government employees and which will affect the duties they perform as employees of General Dynamics.

It is absolutely essential that the company and any such employee abide strictly by the letter and spirit of these policies and procedures to preclude the fact or perception of illegality or impropriety.

Selling and Marketing

As employees, we should remember these key points in connection with sales or marketing of our products and services:

If at any time, it becomes clear that the company must engage in unethical or illegal activity to win a contract, that business will not be pursued further.

It is our responsibility as employees to understand the requirements of the customer and do the very best we can to satisfy those requirements by submitting realistic proposals on performance, cost and schedule.

We must make certain that the company's contractual obligations are clearly defined.

All information we provide relative to General Dynamics products or services should be clear and accurate.

Antitrust

The antitrust laws of the United States and other countries are extremely important.

A wide range of transactions or practices are prohibited under those laws. No agreement or understanding may be made with competitors to fix or control prices, to allocate products, markets or territories, to boycott certain customers or suppliers, or to refrain from or limit the manufacture, sale or production of any product.

The provisions of the antitrust statutes apply to both formal and informal communications. Employees involved in trade association activities or in other situations allowing for less formal communication among competitors, customers or suppliers must be especially alert to the requirements of the law.

Anyone in doubt as to the application of the antitrust laws in the United States or overseas should immediately consult a company attorney.

Pricing, Billing and Contracting

Employees who are involved in any way in the pricing, billing or contracting functions have a special responsibility to:

- understand and adhere to all applicable procurement regulations and relevant company policies and procedures with regard to all aspects of the sale of General Dynamics products or services.
- ensure that cost accounting standards and principles of cost allowability as well as relevant company policies and procedures are properly and consistently followed.

- establish prices for company products and services that are fair and reflect their cost, the technology involved, the difficulty of overall performance, the market conditions, and all other relevant factors. In our pricing negotiations with the U.S. Government, we must at all times adhere to the provisions of the Truth in Negotiations Act and relevant company policies and procedures. Our prices should be clear, accurate and presented so as to be fully understood by the customer.
- accurately reflect, in all invoices to customers and others, the product sold or services rendered, the true sales price and terms of sale. Payments received in excess of amounts billed must be promptly refunded or customer accounts credited, as appropriate.

Time Card Reporting

Timely and accurate completion of time cards as described in company policies and procedures is essential. We must ensure that no cost is allocated to a government contract which is unallowable, contrary to the contract or related regulations, or otherwise improper. All employees shall report only the true and actual number of hours worked by them. Shifting of costs to inappropriate contracts is strictly prohibited. Reporting of hours not worked, but for which pay is received, must also be true and accurate.

Suppliers and Consultants

Whenever possible, materials, supplies, equipment, consulting and other services should be procured from qualified suppliers at the lowest cost, keeping in mind the requirements for quality, performance and the vendor's ability to meet delivery schedules.

As a company and as individual employees, we will always employ the highest ethical business practices in source selection, negotiation, determination of awards and the administration of all purchasing activities. Whenever feasible, we will encourage, establish and maintain competition and will at all times comply with applicable government regulations and contractual

requirements as well as company policies and procedures.

Except for items that are clearly promotional in nature, mass produced, trivial in value, and not intended to evoke any form of reciprocation, employees of General Dynamics may not accept gifts, entertainment or anything else of value from current or potential suppliers of goods or services from consultants to the company. Solicitation of any item, regardless of value, is expressly prohibited.

Quality and Testing

It is our responsibility as a company to ensure that our products are designed and manufactured to meet the appropriate inspection, test and quality criteria of our customers, to perform the testing necessary to meet these criteria, and to provide the necessary documentation in support of this testing. The inspection and testing documentation must be complete, accurate and truthful. As employees we are all expected to be aware of and exercise this responsibility, as our jobs require.

Expense Reports

Business expenses properly incurred in performing company business must be documented promptly with accuracy and completeness on expense reports.

In the filing of expense reports, employees must distinguish between personal expenses and business travel expenses, business conference expenses and business entertainment expenses.

Employees using company funds for such expenses should indicate where, in their judgment, certain costs are or might be unallowable or inappropriate charges against government contracts.

Company and Customer Resources

The ability of General Dynamics to meet the broad commitments to customers, suppliers, employees, shareholders and communities, depends on efficiently utilizing company and customer resources. These resources include technology, data, buildings, land, equipment, cash and the time and talent of employees.

As employees we may not make improper use of company or customer resources nor permit others to do so.

This particularly prohibits the payment of bribes, kickbacks or illegal payments of cash or other gifts in any form and in any amounts.

Other examples of improper use include unauthorized appropriation, possession or personal use of company or customer assets, technology and patents, software, computer, communication and copying equipment or office supplies. Also forbidden is the unauthorized possession, use, alteration, destruction or disclosure of company sensitive data.

Technology and Information

The backbone of General Dynamics as a competitive business is our ability to develop and use high technology in day-to-day operations. Failure to maintain control of our technological edge could cause us irreparable harm. As employees, we are all responsible for guarding our technology against unauthorized disclosure. This applies not only to government classified information, but also to proprietary and private data developed or purchased by us or entrusted to us by customers or suppliers. These restrictions apply whether the information is in written or electronic form or is simply known by us as employees.

Cash and Bank Accounts

All cash and bank account transactions must be handled so as to avoid any question of bribery, kickbacks, other illegal or improper payments or any suspicion of impropriety whatsoever. All cash transactions must be recorded in the company's books of account.

All accounts of company funds shall be established and maintained in the name of General Dynamics or one of its subsidiaries, with the exception of petty cash accounts. All transactions and accounts involving company funds shall be clearly and accurately identified in General Dynamics' books and records. All cash received by the company shall be promptly recorded on its books and deposited in a General Dynamics

bank account. No funds shall be maintained in the form of cash, except to the limited extent reasonably required for normal business operations.

Security

General Dynamics is a major contractor with the Department of Defense. We, as employees, have a special obligation to comply with those government regulations and laws, as well as with relevant company policies and procedures, which protect our nation's security and safeguard our nation's defense secrets.

The effectiveness of national and industrial security is heavily dependent on those individuals who have access to classified information. As employees, security is an integral part of our jobs, whether or not we work directly with such information.

Employees possessing a valid security clearance and requiring access to specific classified information will ensure that such information, in whatever form it exists, is handled strictly in accordance with the procedures set forth by the Department of Defense for safeguarding classified information.

We should not seek access to, accept or retain any classified materials for which we have no need or to which we are not entitled.

The unauthorized possession of classified documents or classified information in any form, or failure to properly safeguard such information, violates these Standards, can endanger the security of the United States, and is punishable under the Espionage Laws and Federal Criminal Statutes.

Political Contributions

Federal law and many state laws prohibit contributions by the corporation to political parties or candidates. Where prohibited by law, therefore, no company funds or other assets are to be contributed or loaned, directly or indirectly, to any political party or for the campaign of any person for political office, or expended in support of or in opposition to such party or person.

Where corporate political contributions are legal in connection with state, local or foreign elections, such contributions shall be made only from funds allocated for such a purpose by authorization of the Board of Directors.

The company encourages all of us as employees to participate on an individual basis in political activities on our own time and in our own way.

Environmental Actions

As a company and as employees, we must exercise good judgment with regard to the environmental aspects of our use of buildings and real estate, our manufacturing processes and our products themselves. All necessary action must be taken to eliminate the generation, discharge and disposal of hazardous materials. We must comply fully with all federal, state and local environmental protection laws.

Safety and Health

As a company and as individual employees we are responsible for maintaining a safe and healthful work environment. We must comply fully with all federal, state and local health and safety laws and regulations.

International Business

Special care must be taken to identify and accommodate the differences between international markets and those in the United States.

As a company operating internationally, we encounter laws which may vary widely from those in the United States. These laws may on occasion conflict with one another. Local customs and practices with regard to business and social dealings may also vary from country to country. Our policy is to comply with all laws which apply in the countries where we do business. The laws of the United States and the countries in which General Dynamics does business must be obeyed. Furthermore, in countries where common business practices might be less restrictive than those outlined in the Standards, we will follow the Standards outlined in this booklet.

The Foreign Corrupt Practices Act and other U.S. laws prohibit the payment of any money or anything of value to a foreign official, foreign political party (or official thereof) or any candidate for foreign political office for purposes of obtaining, retaining or directing of business. As a company and as employees, we must strictly abide by these laws. Any violations or any solicitations to violate must be reported immediately.

The Foreign Corrupt Practices Act, although silent on the subject, is said not to prohibit so called "facilitating payments," such as payments for expediting shipments through customs or placing a transoceanic telephone call, securing required permits, or obtaining adequate police protection — transactions which simply facilitate the proper performance of duties. While company policy does not prohibit such payments, employees are to seek advice in advance from company legal counsel in cases where facilitating payments may be involved. Any such facilitating payments must be properly accounted for in the company's records.

Proper Use of the Ethics Program

An important aim of the Ethics Program is to provide guidance to all employees on matters of ethics and business conduct. The Ethics Program is available to answer questions, give advice, address concerns and investigate allegations related to the meaning and application of the Standards of Business Ethics and Conduct.

Unfortunately such a program is subject to abuse. From time to time, in the name of "Ethics," an employee may attempt to harm or slander another employee through false accusations, malicious rumors or other irresponsible actions. Such attempts, if proven, will be subject to discipline.

Again, from time to time, an employee who exercises responsibility for upholding the Standards may be threatened with reprisal by other employees including management. Such reprisal is not only against company policy but, in some instances, is also a violation of the law. Reprisal, if proven, will be subject to commensurate discipline.

ACKNOWLEDGEMENT

As a condition of employment, all new employees are asked to sign an Acknowledgement Card which states:

"I have received and read the Second Edition of the General Dynamics Standards of Business Ethics and Conduct. I understand that these Standards represent the policies of General Dynamics."

All current employees are also asked to sign an Acknowledgement Card each time the Standards are revised and redistributed.

One copy of the card is to be retained by the employee. The other copy is placed in the employee's permanent personnel file.

All standard consultant agreements include a clause requiring adherence to the Standards as a condition of the agreement.

All active suppliers receive an annual solicitation to help support the Standards in business relationships between them and General Dynamics.

HELP AND INFORMATION

The company has designated personnel to assist employees in resolving questions involving ethics and conduct. As employees, we should not hesitate to avail ourselves of the help.

Supervisors

An employee with a need for help or information regarding these Standards is encouraged to take up that need with his or her immediate supervisor. If there is reason why asking the immediate supervisor is inappropriate, the employee should seek the help of the Ethics Program Director or a company attorney.

Ethics Program Directors

Ethics Program Directors have been designated for each of the various company locations and are available for employee counseling and assistance with regard to these Standards. The Ethics Program Directors may be reached by way of regular telephone, hotline, letter or personal visit. Inquiries will be treated with courtesy and discretion.

Company Attorneys

Company attorneys of General Dynamics are available to employees and management for assistance and information with regard to these Standards and for the issuance of interpretative opinions.

DISCIPLINE AND MANDATORY SANCTIONS

The Standards in this booklet are important to the company and must be taken seriously by all of us as employees. Accordingly, violations of these Standards will not be tolerated and, in accordance with company regulations and applicable collective bargaining agreements, will result in one or more of the following sanctions, as appropriate:

- A warning,
- A reprimand (will be noted in individual's permanent personnel record),
- Probation,
- Demotion,
- Temporary suspension,
- Discharge,
- Required reimbursement of losses or damages,
- Referral for criminal prosecution or civil action.

SUMMARY

It is the objective of the company and each of us as employees, to operate according to the highest possible standards. We have a serious responsibility to ensure that our personal conduct is above reproach and, difficult as it may be at times, we also have obligations regarding the conduct of those who work around us. In cases where we are aware of violations of the Standards in this booklet, we should make that situation known to our supervisor or to an Ethics Program Director.

The Standards will be enforced at all levels fairly and without prejudice. Consistent with our obligations under the law, and within the enforcement processes established herein, the company will keep confidential the identity of employees about or against whom allegations of violations are brought, unless or until it has been determined that a violation has occurred. Similarly, the company will take all reasonable steps to keep confidential the identity of anyone reporting a possible violation.

Corporate Policies and Procedures and Division or Subsidiary Standard Practices

The Standards of Business Ethics and Conduct found in this booklet are supported by more detailed Corporate Policies and Procedures (CPPs) and Division or Subsidiary Standard Practices (SPs). These policies, procedures and standard practices provide clear and specific directions concerning everyday business practices and behavior. Employees wishing to consult a Corporate Policy or Procedure and Division or Subsidiary Standard Practice should ask their supervisor or an Ethics Program Director.

APPENDIX I

Timeline of Surveys and Interviews

April, 1983	April 1983 Survey of Production
March, 1988	March 1988 Survey of Material
February, 1989	February 1989 Engineering Survey
June, 1989	June 1989 Survey of Material (resurvey)
June/July, 1989	Interviews with Planning Group
July/August, 1989	Interviews with Cultural Group