VALUE SHIFTS AND MANAGEMENT
TRAINING NEEDS
FORECASTS FOR 1990

by

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ABSTRACT

There are many forecasts associated with the basic value changes that are occurring within our society. Some describe these changes as being the result of a different conglomeration of people. Some discuss the value shifts in terms of the higher state of consciousness to which we have evolved. Others describe the changing values as being a result of both of these factors. During this decade the direction and degree of change in organizations will be profoundly influenced by these changing values. Changes in the nature of organizations will inevitably mean changes in management training.

This study was a content analysis of fourteen studies concerning the changes expected during the present decade in the overall values of the population and the various implications for organizations and management. One of these studies is a Delphi approach conducted by this researcher to further explore these value questions with management personnel. Each study was organized according to four basic levels of change: organizational and national climate, technology; the organizational structure (time and hierarchy); and the nature of people or values.

The findings of the studies can be summarized as follows. The United States is becoming a Service Economy and this trend will increase more so by 1990. Along with this is an increase in government regulations. The trend toward organizational democracy will probably increase. Little was conclusive concerning the Quality of Work Life trend. The soft technology of Decision-making would increase greatly by 1990 along with Information Processing and Computer planning. Flex-time was seen as being an important consideration with a more flexible
management hierarchy, an emphasis on innovation, and increased decentralization. Most felt that women and other minorities would continue to increase in the labor force. There should be a greater desire for personal growth, an increase in the Leisure Ethic, a greater increase in the motive of experiencing one's work as an interesting activity and a greater increase in the trend toward individualism. The resultant management training needs as would be expected are discussed along with other training alternatives.
ACKNOWLEDGEMENTS

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CHAPTER ONE
INTRODUCTION

Purpose

There is a general agreement that change will be a pervasive characteristic of the future. In all areas of society, successful adaptation and adjustment will be based on our abilities to anticipate the kind of changes that are likely to occur. This study is concerned with the perceptions of management personnel and social scientists as to the kind of future that can be expected in light of changing values.

Management in the future will be, from necessity, management in an "age of changing values." Consequently, wide gaps between the expectations of our average citizens and attitudes of our dominant institutions will be avoided. Bridging this gap is a matter of great concern to the business profession.

Forecasts by management personnel and social scientists of future value shifts are important for at least two reasons. First, such forecasts represent expert estimates by those whose job is anticipating the twists and turns in the road ahead for business. Second, the forecasts themselves represent perceptions which are likely to serve as self-fulfilling prophecies.

Changes in human values will mean changes in organizational behavior. Changes in organizational behavior will mean changes in organizational communication. Both kinds of changes will mean new imperatives and opportunities for training.
Justification

The study of human communication has long recognized that networks and products of interaction are derived from culturally defined patterns of behavior. Culture is an abstract concept referring to built-in assumptions and rules of behavior. Thus, in order to avoid a "breakdown" in communication between individuals of different cultures, an awareness of the fact that attitudes, beliefs, and values may differ is encouraged. If this fact is ignored or unknown the individual who is placed in the midst of an unfamiliar culture may experience what is popularly termed "culture shock." Culture shock is the result of interacting with an environment in which there are no familiar psychological cues that enable one to function effectively.

Alvin Toffler adopted a similar theme at the onset of the 1970's in regard to rapid change and the future. The term "future shock" served to heighten the awareness of the need to prepare for a rapidly advancing time in which the rate and nature of change might be so drastic as to result in dire consequences for individual adjustment. Toffler suggests that the future shock phenomenon is a derivation of the superimposition of a new culture on an old one...culture shock in one's own society. Toffler's "strategy for survival," Platt's "what we must do to survive," Waskow's "participatory future-building," Schon's "regulatory learning system," Michael's "future-responsive societal learning," and Friedman's "transactive planning," are all expressions of an urgent need to understand the role of future-consciousness in an evolving society. Each work expresses the theme that, for collective decision making, it is necessary to develop awareness of the future.
Attempts to predict the problems and consequent decisions that will be facing managers in this decade will be complicated by four major factors: the accelerated rate of change; the irrelevance of past experiences; the difficulty in anticipating technological change in light of other variables; and especially the enigmatic character of cultural features (needs, values, work motives, etc.).

Prior to the twentieth century, the rate of change was so slow that changes went relatively unnoticed during a person's lifetime. Since 1900 there has been more changes than during the entire recorded history of mankind. During the last twenty years, in fact, technological advances have occurred at such overwhelming rates that production and consumptions of goods and services is comparable (in terms of witnessing significant transformations) to a stop-action movie in which the blooming of a flower is condensed into five seconds. This rate of change has been the impetus, to a large extent, for the continually growing emphasis on futures research and related efforts variously called "futurology," "futurism," and "futuristics."

The average manager routinely forecast budgets, and to project the availability of resources, these predictions have traditionally been based upon past experience. Organizations today can well expect to experience "future shock" not because they are failing to anticipate the future, but because they are anticipating a future based on the past. It is becoming increasingly clear that organizations in the future must not simply respond to accelerated change but must be prepared to deal with unpredictable cultural changes. Management expert
Peter Drucker recognizes this development as he warns that "the most accurate quantitative projection never predicts the truly important: the meaning of the facts and figures in the context of a different tomorrow."  

Science has become a two-sided force both of good and evil. The "World Conference on Faith, Science and the Future" under sponsorship of the World Council of Churches in cooperation with the Massachusetts Institute of Technology, recently examined this conflict. There are those people who advocate stopping the drive toward greater technological power through moratorium and a return to simple lifestyles. Another trend of thought says there is no recourse but to go on with technological advances in the hope solutions will turn up to temper and humanize the process.  

Dangers of hazard to larger numbers of people and larger areas of the environment have recently characterized concerns of changing technology. Increasing numbers of near catastrophe such as oil spills (Trinidad-Tabago), radiation leakage (Three Mile Island), major aircraft crashes (O'Hare, Chicago, May 1979), and large-scale power failures (New York City, 1978), have stimulated huge debates over the ethical and environmental considerations of the implications for further technological advancement. These concerns represent social forces that have begun to have greater impact on the decisions managers must make in regard to their daily operations. Management is only now beginning to comprehend the extent to which it has previously disregarded
environmental effects such as social protest. Society, now, possesses the sets of constraints and opportunities, resources and demands, which ultimately condition the terms under which organizations may act.

Technology is, as has been indicated, not the sole determinant of the future. The actions which derive from individual and aggregate human needs will ultimately determine the use of technology and the future of work. It would be short sighted for the manager of a typical business organization of the 1990's to assume that technical innovations will take precedence over all else.

The world of work has historically taken its shape from the underlying needs, values and the resulting assumptions which prevail within the culture of the times. After all, work is a human activity that is collectively if not individually directed toward the satisfaction of human needs and desires. There is no reason to assume that this match will not continue.

The nature of the work force has changed significantly in terms of the average age, the sex, and educational level of workers. Today 24.9 percent of the work force is 24 years old or younger. That figure was 18.5 percent in 1957. In the last four years the percentage of workers 55 years and older has declined. Since Congress decreed that employers cannot force their workers to retire before they reach 70, there will be changes in the age distribution of workers in the future. This has tremendous implications for marketing as the "youth" appeal is expected to diminish since a greater percentage of the population becomes older.

Women made up 40.1 percent of the total work force in 1980 as
opposed to 31.2 percent in 1957. Today 39 percent of the work force hold college degrees. In 1969 that figure was less than 30 percent. Both the levels of education and the percent of women in the labor force will continue to rise into the next decade.\textsuperscript{12}

An organization is changed by the people who make it up. This internal force can steer the organization in new directions and make new demands. According to studies issued by the U. S. Department of Health, Education and Welfare, the younger, better-educated work force is looking for quality in their work life in terms of challenge and the nature of their jobs.\textsuperscript{13}

Although management practices and personnel policies have changed and improved, it seems that employees' values and their expectations have been evolving at a faster rate. According to Cooper, Morgan, Foley and Kaplan (1979): "The 1960's were characterized by increasing demands for, as well as, tolerance of self-expression, self-fulfillment, and personal growth — everywhere but in industry. These demands are really just beginning to be voiced in industry, where employees at all levels, many of whom are recent graduates, now feel that they, too, are entitled to experience some intrinsic satisfaction from their work."\textsuperscript{14} This "New Breed" is said to "hold a set of values and beliefs so markedly different from the traditional outlook that they promise to transform the character of work in America in the 80's...perhaps to question will dominate the workplace in the 1980's more than how to revamp incentives to make them a better match for the work motivations."\textsuperscript{15}

\textbf{The Concept of Change}

Since the concept of change represents an integral part of this
study, it is necessary that two aspects of such a notion be addressed. The first is consideration of the meaning of the concept and the second has to do with expectations about its occurrence.

The concept of change can only be expressed in relative terms because it is so elusive. The concept is an abstraction rather than an inherent attribute of reality. When change is perceived as having occurred, it typically means that there has been an alteration relative to a previous state or an inferred relationship. In discussing change, we are of necessity dealing with an abstract construct and therefore, the relational reference must be carefully specified. Thus, when considering value prediction change, we must consider the meaning of such alteration in terms of its present meaning.

The expectations about the occurrence of change is generally characterized by stability. However, change is as reasonable to expect as stability in any given situation. Yet, the potential for a "Thing" to continuously equilibrate is not usually recognized. We consider "how to overcome resistance to change" rather than "how to overcome resistance to stabilize." This tendency seems to be a culturally derived expectation.

The traditional organizational response to change has assumed this expectation. Warren Bennis maintains that every age has developed an organizational form and lifestyle which is most appropriate to the genius of that age and that they are built on certain assumptions about man and his environment. These assumptions have presumed the environment to be placid, predictable and uncomplicated. Bennis warns that,
"organizations based on these assumptions will fail...for the very same reasons that dinosaurs failed; the environment changed suddenly at the peak of their success."\textsuperscript{17}

Leavitt's organizational societal harmony reflects the supposition that change is superceded by a leveling off.\textsuperscript{18} Leavitt's analysis, while beginning to address an evolution or process of development of society and its organizations, still reflects the equilibrating characteristics of the traditional expectations concerning the change concept.

The assumption of organizational societal harmony can best be evidenced by sketching the historical development of organizational/management theory in the context of the evolution of the American culture.\textsuperscript{19} The following section will consider four models of organization theory generally considered to represent major contributions to the field: the "classical," human relations, socio-technical systems, and the contingency schools. A complete or detailed account of organization theory is not intended. Rather, the focus is on the expectations each school of thought held in anticipation of and response to change.

**Organizational Response to Change**

The "classical" school commonly represents the first systematic theory of organizational thought. Theoreticians of this era were concerned with questions of efficiency or the maximization of output-to-input ratios. Their primary interests were to identify the laws or principles upon which efficient organizational process would
develop. They assumed that the information they documented represented the underlying, permanent truths of the functions of management and organization. Planners of the classical school believed that organizational tasks could be specified and subject to central control, thus creating stability and efficiency. Change was addressed in terms of the mechanics of the job. Organizations of the day were free-wheeling, aggressive organizations which, for the sake of production, abused the physical environment and exploited the available work force. They embraced the techniques of Taylorism for rationalizing and simplifying work, and for permitting the use of people as muscle rather than whole men (Leavitt, et al., 1973).

The relationship between the society and its organizations was appropriately given that American organizations in the early 1900's were comprised of a cultural conglomeration of relatively unskilled workers with little organized power. Thus, management was generally free to exercise their control and was free to focus on the mechanics of the job, rather than the individuals employed. Prior to the Industrial Revolution, economic institutions were relatively small, family enterprises, based on traditional lines of authority. People were not aware of the process of organizing nor of the system of knowledge that allowed coordination of activities because change was not rapid, i.e., because the relationships were old and established and had evolved slowly, there was no reason for attention to be focused upon their connection, it was more or less an unconscious response.

The "human relations" movement represented the first realization that non-economic reasons for working—internal and social
motivations—were an important consideration. The human relations approach began when a group of researchers from Harvard University were invited to conduct studies at the Hawthorne Plant of Western Electric in Chicago. This and subsequent studies of the behavior of workers led to revised assumptions about human nature. Numerous training programs were undertaken to teach supervisors how to understand people and groups in the work situation.

In regard to the anticipation of and response to change, the human relations approach was not unlike that of the classical era. Both proposed universal theories of organizational design. Both advocated the "one right way" to function and both proceeded to document their findings with the attitude that there are principles by which all organizations can be efficient. Although the latter model identified a new dimension which could impact the efficiency of production, the underlying expectations were that these dimensions could be stabilized. There was nothing built into either model which would address external or internal pressures for change. The predominant way of handling change during the first half of this century was to operate under a conception of organizational autonomy. Decision-making and planning were conducted within a set of assumptions predicted on change for that organization but stability for all else. The American Society began to appreciate a broader concept of the nature of man, yet human nature was considered a stable reality whose mystery merely required an uncovering of truth, the documentation of which continued to be of principle interest.
By 1940 there was a generally accepted school of thought that said high morale yielded high production. The goal of production maintained an exclusive priority. Management began to concentrate on employees' resistance to change in terms of structural or job design adjustment and strove to insure cooperation necessary to adapt to increasingly complex technology.

By the time the human relations school became widely accepted, the forces that ushered in the next school of theory were already in existence. The Second World War required human and technological sources be organized on a larger scale than ever before. Coordination was the challenge of the day. The military responded to this challenge by forming teams of engineers, natural scientists and social scientists to deal with these issues of coordination. 22

Following the war this "think-tank" approach was characteristic of the evolution of the new "socio-technical school" of organization theory known as management science. Information management and integration were key concerns of this period. Population growth and technological innovation necessitated this concentration. A new set of assumptions regarding change was developed. Other institutions and organizations were conceived as bodies in motion and one could project the effects an anticipated change in one institution would eventually cause throughout the environment.

During the 1960's and early 1970's, change took the form of more sharply contrasting societal values as well as drastic technological advancements. The concept of organizational change by this time addressed multiple concerns in an effort to remain in a harmonious
relationship with this society. "Quality of Work Life" is a relatively recent campaign that, while recognizing the need for profit, prefers that they be rationalized in terms of social benefits, rather than just in terms of worker benefits. There was a societal shift from values of individualism, competition, and self-interest to those of sharing, cooperation, and enlightened self-interest.23

Corresponding to the recognition of continual variations in the workforce, technology, the environment and society, management theorists now contend that there is no one best way to organize. Effective organizational design is "contingent" on a number of factors, not the least of which is the temperament of their environment. (Lawrence & Lorsch, 1967)

Both the socio-technical system schools and the contingency schools have provided a situational approach to organizations, moving away from advocating an absolute method of organizing and managing to a "right way" for each situation. Thus, these models hold an implicit assumption that anticipation of change is essential. The assumption is present, yet there is no built-in means by which to explicitly anticipate change for adjustment. Change remains a reactive, not an anticipatory factor.

Customarily organizations have introduced change as a reaction to their environment. The most recent meaning of change encompasses both reaction to and anticipation of environmental conditions such as governmental regulations, new products and transforming markets. "Planned Change" or "intentional or purposive attempt by an organization to influence the status quo of itself," evolved from a phenomenon to a norm. (Bennis, Benne & Chin, 1969)
American society is altering in fundamental ways and at present social homeostasis mechanisms are not bringing these alterations back into line. The trends appear to be so rudimentary and unprecedented that in all likelihood both social structure and culture will be affected. One task facing social science is reconceptualization and revision based on long-range extrapolations depicting the shape of a different future. Because organizations play a central role in modern society, this reconceptualization must be set in a framework which shows the relevance of patterns of change to the future operations of such organizations.

The study and understanding of values as they relate to work motives are important to managers in explaining employee behavior for a number of reasons. Values have been shown to relate to decision-making, selection, communication and managerial success. There are a number of questions concerning values which require investigation. The purpose of this study is to contribute to this growing body of research by investigating managerial expectations of value changes, summarizing social scientists' forecasts and analyzing these as to their implications for organizational training needs of the present decade. The rate and complexity of change that will occur in the future mandates a systematic anticipation of and preparation for these changes.

Definitions

The use of the term "value" has proven to be problematic due to the lack of a working definition. Due to the variety of diverse sources from which this study is compiled, for purposes of clarity, the term "motive" will be used to imply both need and value. This author contends that those who have expressed concerns about changing
values are ultimately concerned with different motives to work. A glossary of terms which have been used and confused with values can be found in Appendix 1.

The term "futures research" suggests research that is designed to predict the future. This definition, however, does not describe the purpose of futures research; the future is too complex to be predicted accurately; there is no such thing as "the future." Futures research is an entity in and of itself. "The word 'future' is a relational term. One can only discuss the future of something." This misconception involves the difference between forecasting the future of something and predicting an event. To predict suggests a certainty that is somewhat unreasonable, given that one is dealing with events that can have years of interference.

...futures research is concerned with the derivation of what "ought" to be in human affairs and should not be confused with what "can" and "will" happen, which are the realms of strategic and tactical planning. Futures research has the following more modest objectives:

1. To make explicit the assumptions people hold about the future;
2. To anticipate alternative events or "futures;"
3. To trace possible consequences of important current and past developments;
4. To shape and guide current strategies that might affect the future.

Methods

This study is designed to:

1. Collect forecasts by management personnel and social scientists of value changes likely to alter behavior in business organizations by the year 1990,
2. To categorize these forecasts according to areas of greatest convergence, and
3. To analyze the implications of the converging forecasts for future management training.
Forecast collection was two-fold. First, a listing of forecasting and polling groups, centers and businesses known to be involved in futures research was compiled. Summaries or reports of studies dealing with value changes were requested from these organizations. (See Appendix 2 for the listing of organizations from which reports were sought).

A second means of collection was a Delphi study conducted by this investigator to assemble similar forecasts from management personnel in business organizations. The population sample for this study was available from a listing of management personnel compiled by Speech Communication and Human Relations faculty at the University of Kansas for a planned Leadership/Communication Seminar. This Delphi study, along with those studies obtained from social scientists and futures research centers, are summarized according to the methods employed and the resultant forecasts. These forecasts are broken down by categories pertaining to national and organizational climate or environment, technology, organizational structure mandated by changing values, or technology, and the nature of people making up the work force of this decade. Areas of convergence are identified from these summaries. More conclusions can be made from those forecasts about which there is greatest agreement.

Finally, the forecast areas of agreement of greatest convergence are analyzed as to their implications for future management training.

Organization of Thesis

This chapter is intended to be an introduction to some of the issues seen to be important in forecasting the future for business
organizations. The purpose is to provide an historical backdrop by which the reader can become oriented to present efforts for addressing organization change. Chapter One outlines the intentions of the present study.

Chapter Two is a review of the literature regarding what exists in this particular area of investigation, i.e., forecasting value changes specifically as they relate to work motives.

The Third Chapter will provide a summary of each of the studies or reports dealing with forecasting value changes and consequent work motives and their probable effect during this present decade.

Chapter Four will identify the areas of greatest convergence among the studies summarized in the previous chapter and Chapter Five will discuss the implications for future management training.
NOTES


9 From the National Observer, January 10, 1976.

10 Ibid.


19 The terms "management" theory and "organization" theory are often used interchangeably, although "organization" theory is often confined to explain structure while "management" theory is used to explain and/or prescribe the managerial job. Thus, "organization" theory is of "management" theory and will be used here as such.

20 Ibid., pp. 3-6, 8-9.


22 Ibid., pp. 144-146.


CHAPTER TWO
REVIEW OF THE LITERATURE

The first section of this chapter will provide an overview of the body of research concerning work motives. The second section is an introduction to the nature of Futures Research, its history and how it presently fits into management research. The third section of Chapter Two will review the literature concerning research specific to forecasting value changes.

Work Motives

Work motives began to be considered as the behavioral sciences became involved in the study of organizational life. The human relations movement which began with the work at the Hawthorne plant of Western Electric in 1927 gave way to "the industrial humanist movement: in the late 1950's, (cf. Scott & Mitchell, 1972). Both of these added to or expanded upon issues concerning the behavioral sciences and the study of man in organizations. Their thrust was toward the achievement of more effective and efficient utilization from repression, the development of a sense of commitment, and increased satisfaction with the job and the organization.

Influenced by such theorists as Maslow, McGregor, Argyris, Bennis, and Likert, the motive to work became a chief concern to management. Studies of work motivation can be divided into two broad classes: content and process theories.

The content theories include works of Maslow (1954), McClelland (1961) and Herzberg (1959). These attempt to identify what actually
motivates people "to" work. Process theories, on the other hand, attempt to describe how behavior is directed and sustained, (Vroom, 1964, and Porter and Lawler, 1965) Both classes of motivation theory have contributed a great deal to the understanding of work motives and how these can influence production. There has been some consideration of changing motives within a given individual over time and certainly a recognition that there will be individual differences (individuals are not motivated by the same things, need levels fluctuate within a given population) Due consideration, however, of changing work motives that predominate in a given culture over time has rarely been undertaken. Further, organizations, at present, show more concern for the technology of work than for their social inputs and human resources. With the emphasis on technical and economic efficiency, primary attention has been directed to recruiting and selecting members with the "proper" training and aptitude for filling inflexibly defined jobs rather than to problems of member attitudes, needs and values. Insufficient attention has been directed toward utilizing or understanding values in designing organizational system or rewards, selection, placement, and decision-making.

For the most part, the emphasis for studying motivation has been on the search for improved modes of cooperation which have resolved into "improving" worker's motivation and satisfying their "basic" needs, assuming that motives and needs are stable. This relates back to the expectations regarding change and the view of human nature as being of a relatively fixed character. It has been reported that effective and ineffective employees within a given organization have
different values and value systems. Some contend that sources of conflict between superiors and subordinates are a result of differing value orientation. In one study, indications of value similarity with supervisors and their subordinates related significantly to leadership style. Insights into an individual's value structure have provided management aid in managerial and personnel decisions such as job classifications, transfer, or promotion.

If performance criteria were known to be related to specific values within a classification, prospective candidates could be screened for the consistency between their self values and the values of those known to be successful. Information about individual's value systems could be used to differentiate between those people holding and not holding management level positions.

The importance of understanding individual's values and the resultant motives to work is directly related to the ability to understand and manage behavior. It is generally accepted that behavior is strongly affected by the nature of individual value systems. Further, values are used in processes of establishing standards, judging issues, debating options, reaching decisions, planning activities and resolving differences. Recognizing value systems is an essential prerequisite to designing effective motivational systems.

Futures Research

The contemporary American futurist movement has originated from two currents beginning independently, though simultaneously, and have tended to merge over time. One current had its origin in 1965 with the establishment of the Commission of the Year 2000 by the American Academy of Arts and Sciences. This commission was composed of prominent
researchers headed by Daniel Bell, Harvard Sociologist. The commission held conferences, authorized studies, and for the first time, made inquiry into the future academically respectable. The work of the commission soon became intermeshed with that of one of its most important members, physicist Herman Kahn, who had come to futurology through his interest in technological forecasting in the area of nuclear weaponry. Kahn and his associates at the Hudson Institute (originally, like RAND, a military oriented and supported "think-tank") soon published *The Year 2000* (Kahn and Weiner, 1967), a companion volume to that produced by the commission, *Toward the Year 2000* (Graubard, 1967). These two volumes constitute the founding documents of academic futurology in America.

Futurology owes its existence to the belief that scientific and technological developments are relatively amenable to prediction and can serve as the basis for predicting social change. The beginnings of organized futures research can be dated from 1944, when General Arnold, the commanding officer of the United States Army/Air Force, commissioned a study of future military technological capabilities. (*Toward New Horizons*, 1947) The RAND Corporation was formed in 1948, as the outgrowth of the USAF Project RAND had begun in 1946. Much of the solid methodological work in futurology has come and still does come out of this background.

Futurology as a movement and a discipline is equally reliant on two related forces in modern western culture. The utopian tradition is considered to be its first major expression, the other is the literary genre usually called science fiction, which originated in the utopian and romantic traditions but has only taken on its present identity in a century dominated by science and technology.
The emerging discipline of futures research may have a considerable impact on corporate planning provided there is adequate understanding of the tools and techniques. The basic methods are usually grouped as follows: 1) authority methods, 2) conjecture methods, and 3) mathematical modeling. (See Figure 1)

**Authority Methods.** The oldest method of obtaining forecasts has been to elicit the views of an authority. This can be done by considering a sole-source such as an academician or noted authority in a particular field. Those who enjoy a highly regarded status in a given area, and may have influenced its evolution to present, may be called upon to anticipate the future state of events.

The use of a polling method is also common and requires a group of authorities in a given area. The rationale for the use of a group over an individual is that:

1. A group of experts can generate and analyze more alternative futures;
2. A broader set of facts can be relied on, more opinions can be expressed, and sometimes more estimates of the future can be developed;
3. Specialists as well as generalists can be utilized in areas of high importance in order to help synthesize facts, refine opinions, and secure estimates.

The Delphi is one such polling technique and will be discussed further in Chapter Three.

**Conjecture Methods.** A second category of futures research methods are qualitative and quantitative conjecture. Scenario construction and future history construction are examples of qualitative conjecture, while cross-impact matrices and relevance trees would be examples of quantitative conjecture techniques.
Futures Research Methods

Authority Methods
- Sole-source Method
- Polling Method

Conjecture Methods
- Qualitative
  - Scenarios
  - Future Histories
- Quantitative
  - Cross-impact Matrices
- Deterministic Models
- Stochastic Models

Mathematical Modeling
- Relevance Trees
Mathematical Modeling. The mathematical model building techniques involve the construction of relationships that portray other relationships in the "real world." These methods, however, are more concerned with understanding a system than with forecasting events.8

Because of the rapidly changing environment, business should recognize the value and utilize methods of futures research as a part of the planning, organizing and controlling functions of management. Some organizations have begun to utilize these tools for some aspects of planning. See Appendix 1 for a listing of corporations, trade associations and scientific laboratories that are involved in some aspect of futures research.

Changing Work Motives/Value Forecasting

Friedlander and Brown (1973, p. 314) note that the primary concern of contemporary organization theory has been "in describing, analyzing and theorizing about the status quo of the organization." Management, however, is generally defined as the study and improvement of forms of cooperation in changing socio-economic structures. It has "accepted the values of the leaders of organizations (which has usually reflected the values of the dominant culture) and seeks to develop modes of understanding which enables those leaders to attain their objective."9

This body of literature, however, has not supported its claim to recognize change to the extent that it may be necessary. The possibilities of long-term structural change in society, changing power structures and values are rarely considered (cf. Mayntz, 1964; Perrow, 1972; Silverman, 1970).10 With few exceptions (Alderfer,
contemporary organization theory has not contributed to the study of motives to work.

From a computer search of the contemporary management literature dealing with forecasting, this researcher discovered that only five of the sixteen hundred sixty-two citations considered values or work motives to be changing. Not one of these five included implications for such a change. The other sixteen hundred fifty-seven citations dealt with forecasting in terms of product markets surveys, resource availability, sales and time-series analysis (a fairly complex statistical device which analyze the relationship between sales and time). A few corporations, however, have begun to treat social and political trends as seriously and with the same attitude as economic predictions and forecasts.

The Sun Oil Company, for example, has established an "Environmental Assessment Group" in which environment refers not to air, water, and land, but to the economics, technology, politics, and society in which Sun operates today and in the future.

The Environmental Assessment Group consists of Sun's chief economist, a specialist in technological assessment, and a public issues consultant—all reporting to the vice-president of environmental assessment. The chief economist evaluates and forecasts the state of the economy; the technological assessment specialist covers technology and science and the public issues consultant concentrates on politics and society. Eric A. Weiss, the Public Issues Consultant, recognizes the Sun, "in common with many other businesses, has recognized that we must try to look into the future and include in our consideration the social and political issues and trends, because their impact is frequently more important than economic or technological factors."
Two research endeavors of the 1970's are important to include here. While they do not pertain to the same time frame as the present study, they are good examples of the type of research in terms of methodology, in one case, and subject matter, in both cases, toward which this project is directed.

In a forecasting study conducted by Arnold Mitchell in 1965, a profile of society in terms of needs and values was constructed. The profile made rough estimates of the percentage of Americans who operate modally in each of Maslow's five need levels. The purpose of the study was to examine ways in which this profile could be exploited in examining alternative futures in terms of dominant value patterns.

One alternative, for example, was labeled the "Momentum" society and depicts a society that can be expected, should present trends continue (this, of course, refers to trends of the 1960's). The "Momentum" society indicates a shift from belongingness to esteem needs; persons at the survival level would practically disappear and those at the growth (self-actualization) level would increase from 2% to 12% of the population.

A second societal configuration was labeled a "Belongingness Society."

We hypothesized that the nation could elect to mount a gigantic educational effort to move most of its citizens now "hung up" at survival and safety levels to a more collective mode of life. If successful, these efforts might reduce the fraction of the population operating at levels 1 and 2 from 25% to perhaps 7%. A second change is an assumed drop in the esteem-oriented population from 30% to 20%. This drop might come to pass for two principal reasons. First, the societal effort required to move over 70% of the survival
and security oriented people to the belongingness level is likely to be so massive as to drain away resources currently flowing to the esteem level. Secondly, the Belonging society attempts by its nature to impose a monolithic homogeneity on its citizens. One result of this would be to "drag down" to the belongingness level people who are insecurely ensconced at the esteem level. It is considered that growth-oriented could withstand this external social pressure. For this reason, no change is foreseen in the ranks of Level 5.

It should be noted that all figures quoted above are purely speculative approximations of one need level relative to the other four.

Although Mitchell's study does consider broad economic and institutional parameters that might be of interest to management, e.g., a "Momentum" society would expect a 4.1% GNP growth rate with a rise in technical and professional ranks and a decline in manufacturing and agriculture, it can hardly be classified as management data. It is included here to illustrate the emphasis on the significance of speculation concerning value shifts and implications of such alteration.

The second study which does not pertain to the time frame of this project but is included as an example of a similar subject and methodological approach was conducted by the General Electric Company in 1967. This project represents a major contribution to the interface of business and future predictions concerning value changes. This study was conducted by the Business Environment component in Personnel and Industrial Relations as "the first in a continuing series of studies on major forces re-shaping American society." 16

This initial overview was a product of an extensive literature search of more than fifty authors and of interviews conducted with sixty-six persons, primarily educators in the social-science area.
The study examined trends with focus on:

1. Concentration of the following five to ten years, with the 1975-80 periods as the outer range of predictions;
2. Developments during this period in the United States;
3. Developments affecting the availability, attitudes and behavior of this society's human resources.

A profile of the dimensions of change follows (See Figure 2).

Among the predictions derived from the G. E. study, those which pertain specifically to business include:

1. U. S. domestic institutions as we know them today will endure in substance, but change in function, style and values.

There is too little support for radicalization of society, or even of the universities which have been the seat of the most violent disorders. There is a core of conservatism in the American make-up that will act to make changes evolutionary rather than revolutionary. Nevertheless, these changes will be pronounced and widespread in all our institutions, as a result both of internal pressure from the changing aspirations and value systems of their members and of external public, governmental, economic and technological pressures. (G. E. Report p. 2)

2. Technological change, by itself, will demand a greater degree of institutional change than was explicitly recognized.

- The organization must encourage experiment, flexibility and variety;
- There must be a thorough going democratization of the system;
- There must be created a capability of seeing technological change as a whole, including the social, political, cultural, and psychological side effects. (G. E. Report p. 4)

3. There will be growing importance attached, in all organizations, to the formulation of explicit goals.

Explicit goals will also be needed to create organizational focus and identity in an era of change. It is no doubt true that planning and goal-setting increase in importance as they increase in difficulty. Though the degree of future uncertainty, and the number and strength of external forces,
This figure indicates the results of the 1969-1980 study.

As seen by General Electric's Business Environment Section, the profile of significant value-system changes: 1969-1980

**Figure 2**
might appear to make goal-setting an exercise in futility for any organization, it must be attempted if the system is not to lose direction and fall victim to centrifugal forces. (G. E. Report p. 4)

4. All organizations will be operated less and less by the dictates of administrative convenience, more and more to meet the wants and aspirations of their membership.

So long as organizations were concerned principally with a relatively stable environment and the maintenance of internal order, they could rely on the routine administration of detailed procedures. Dealing with the uncertainty of change reduces the value of set procedures, and increases the value of individual initiative. (G. E. Report, p. 6)

5. There will be a slow but steady shift in the functions of the Federal government from the operation and management of programs to a role of goal-setting, finding, catalyzing and measuring.

There is a growing recognition that, like an over-centralized company, the nation may, with the present role of the Federal government end up by having neither well run programs nor a well designed set of national goals and priorities. (G. E. Report, p. 6)

6. Attitudes toward job requirements, and the character of work, will change more in the coming decade than will attitudes toward work as such.

The structure of work will be changing, as work/study programs become more common, sabbaticals are more widely adopted, and part-time work accounts for a greater percentage of total hours worked. (G. E. Report, p. 11)

7. Changes in value systems will be the major determinant of social, political and economic developments on the domestic scene.

It may well be that identifying value changes will become the single most important element of environmental forecasting.17

This report was summarized with the following points:

a. The detailed analysis of the implications of societal change for business has not yet been undertaken.

b. Many indicators of probable business response to change are already visible in sporadic and undeveloped
form—hence the use of terms such as "more flexibility: and less rigidity. However, the full development of all of most of these responses in a single company would represent a change of major proportions over the course of a decade. (G. E. Report, p. 12)

The G. E. Report is an example of the kind of study this project is interested in examining for the decade of the eighties. Although, management literature per se has not dealt with changing work motives, research groups within corporations and as consultants to large organizations have begun to forecast value shifts and their predicted implications for the world of work in the latter part of this decade and this century. The following chapter will provide summaries of such studies.
NOTES


7 For detailed accounts of these methods see


   Selwyn Enzer, Olaf Helmer, and Paul Gray, Alternative Futures for California (Los Angeles, Center for Futures Research, University of Southern California, 1975).


8 See


Owen P. Hall, *Regional Policy Analysis by Computer Simulation* (Los Angeles, Center for Futures Research, University of Southern California, 1974)

9 R. Whitley, "Management Research. The Study and Improvement of Forms of Cooperation in Changing Socio-economic Structures" in *Use of Social Sciences Literature*, ed. by N. Roberts. (Boston Butterworth, 1977) p. 120.

10 Ibid.

11 Examples of these forecasting methods can be seen in.


13 Ibid.


15 Ibid.


17 Ibid.
CHAPTER THREE
REVIEW OF FORECAST STUDIES

The purpose of this chapter is to report the methods and forecasts of a series of studies that are concerned with the central questions of this project: changes expected in values and attitude essential to work that will have an impact on organization by 1990. The studies included were chosen based on their relation to the central questions. They were selected from those research groups and individuals listed in Appendix 2, who responded to this investigator's request for forecast information.

Leavitt (1965) provides a review of a variety of approaches to organizational change. He suggests that one can distinguish a structural, technological, and people approach to change. In this chapter Leavitt's delineation will be utilized as the framework by which forecasts are categorized. An additional category, National/Organizational Climate, is included to provide an area in which to classify those general and/or nebulous forecasts. "Climate" forecasts represent those pointing to overall national direction in regard to such factors as conditions and the nature of the economy, governmental intervention, and the broad nature of social values. Organizational climate would include forecasts which describe an organization's general response to national trends. Such responses might involve forecasts suggesting that organizations would respond with a more democratic or authoritarian management style based on the pressures from its environment.

Technology refers to the entire body of methods and materials used to achieve objectives, particularly those relative to commercial
or industrial goals. This involves both "hard" (e.g., machinery or computers) and "soft" or procedural and process (e.g., decision-making and planning techniques) technologies.

Structure will include forecasts which relate to the organizational chart i.e., the management hierarchy, and to the time-scheduling of employees.

The Nature of People/Values section will include any forecasts that actually describe values and then considers implication for management. Although there will be forecasts in other categories which are, or could be a result of value shifts, this group deals with the broader issues of a particular value orientation. Included in this category may be anything from forecasts of general motives, to work such as recognition or economic motives, to emphasis on personal development and the leisure ethic. Very basic demographic information will be included here as well.

There is considerable overlap among the four broad categories. They are set up to systematize each of the 15 studies and to aid in uniform analysis. By breaking down the forecasts offered by each of the 15 respondents into common groups the observer can more readily determine where there are areas of greatest agreement of convergence.

As each study was received, it was subject to a content analysis. Each specific forecast was labeled and placed into one of the four categories described above. Each forecast was then considered in terms of direction and degree of change. For example, the emphasis on leisure would be placed under the "Nature of People/Values" category. If the specific forecast suggested a significant increase in the emphasis
placed on leisure that forecast would be placed under the "increase greatly" end of the continuum. Each study is analyzed separately by the four given categories. The aggregate results are presented in Chapter IV.

**Original Delphi Study**

In order to discover what expectations are held by management personnel the following study was designed to collect forecasts of the value changes that are likely to alter behavior in organizations by the year 1990. The Delphi Technique was utilized to collect these forecasts. The Delphi Technique has been characterized, in its broadest sense, as a "method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem." Its purpose is to obtain a consensus of informed opinions using, "a set of carefully designed sequential questionnaires interspersed with summarized information and feedback of opinions derived from earlier responses."

The technique permits investigation into reasons for prior responses, stimulates consideration given to the issues by presenting feedback to participants which includes fellow respondents' views, and the negotiation of a collective opinion.

Although Delphi received its acclaim for technological purposes, its use has expanded far beyond this arena to include:

...normative forecasts, the ascertainment of values and preferences; estimates concerning the quality of life, simulated and real decision-making; and what may be called "inventive planning," by which is meant the identification (including invention) of potential measures that might be taken to deal with a given problem situation and the assessment of such proposed measure with regard to their feasibility, desirability and effectiveness.
The diversity of subjects which Delphi studies have covered include scientific breakthrough, economic forecasts, medical developments, automation developments, societal trends, employee benefits, physical and biomedical technologies, educational developments, and technical corporate forecasting.

Linston and Turoff maintain that if one or more of the following properties are present, it is appropriate to use Delphi:

1. The problem does not lend itself to precise analytical techniques but can benefit from subjective judgments on a collective basis,
2. The individuals needed to contribute to the examination of a broad or complex problem have no history of adequate communication and may represent diverse backgrounds with respect to experience of expertise,
3. More individuals are needed than can effectively interact in face-to-face exchange,
4. Time and cost make frequent group meetings infeasible,
5. The efficiency of face-to-face meetings can be increased by a supplemental group communication process,
6. Disagreements among individuals are so severe or politically unpalatable that the communication process must be referred and/or anonymity assured,
7. The heterogeneity of the participants must be preserved to assure validity of the results, i.e., personality ("bandwagon effect").

Three major areas of control that are necessary for Delphi's reliability include:

1. Anonymity - effected by the use of questionnaires is a way of reducing the effect of dominant individuals.
2. Controlled Feedback - conducting the exercise in a sequence of rounds between which a summary of the results of previous rounds are communicated to the participants is a device for reducing noise.
3 Statistical Group Response - is a way of reducing group pressures for conformity and it is a device which assures that each opinion is represented in the final analysis.9

The participants for this study were sought from a list of management personnel generated by the members of the Speech Communication and Human Relations Department faculty at the University of Kansas in 1977 as potential members of a Leadership-Communication Seminar. The list is representative of a wide range of business organizations and, for this reason, offered a rich variety of opinions on the issues under question.

It seems reasonable to conclude that those involved in some form of planning for future organizational training should be perceptive as to current trends and have some ideas as to the future implications of these trends. This study sought the consensus of these opinions.

The Delphi consisted of three rounds. Each round was designed to narrow the participants' responses into a consensus. The procedural details, as well as questionnaire construction, will be described in the following round-by-round outline.

The objective of the first round was to provide participants with a carefully pre-formulated list of obvious issues in an attempt to have them indicate their positions.

A letter describing the study accompanied the first questionnaire. The instructions carried in this introduction informed participants as to the deadline for returning the questionnaire (See Appendix 3 for copies of each questionnaire and cover letters.) Based on this
this response, subsequent questionnaires were followed up by a "dunning" letter to insure consistent response.

The purpose of the first section of the questionnaire was to establish some direction and degree of change on the broad issues which are considered to characterize and influence organizations by the year 1990. This first section was designed to create an overall picture of the structure, environment and perceptions of the nature and function of work which respondents expected to be characteristic. The issues represented were extracted from a theme analysis of the current management literature.

The second section dealt with underlying work motives thought to be characteristic of the work force by 1990. These underlying motives are considered to be directly related to emerging value changes. A model developed by Donald Bowen, based on studies by Wolfe (1969) and Bowen (1973) was adopted to categorize various work motives. They concluded that the best approach in identifying primary motivators would be to establish broad, yet, simplistic categories with the option to identify additional factors. Again, the purpose of this first round is to obtain a sense of direction and degree of change in value shifts. In this section respondents were asked to rank-order the top five work motives which they predicted to be predominant by the year 1990.

The third section of the first round questionnaire was included as a means by which to begin establishing specific employee training strategies that may be important by the end of this next decade.

Each of the sections included represent different approaches to
obtaining underlying value orientations. The utility of the Delphi technique lies in its ability to reveal these primary issues by approaching the subject matter in different ways. Each section is essentially interrelated and can serve to pinpoint consistencies or contradictions, e.g., advocating participative decision-making indicates a democratic vs. autocratic leadership style (cf. Likert, 1961).

The objective of the second round was to refine and prioritize the list of issues both in terms of specificity and completeness. If significant disagreements had surfaced from the first round, they would have been explored in an attempt to discover the rationale. A summary of the first round accompanied the second questionnaire as feedback to those involved.

The second questionnaire requested that respondents indicate their estimate of the significance of work motives and job enrichment strategies on a simple three point scale of more—same—less. This estimate pertains to the values they consider the employee will place on the motives and strategies by the year 1990. In the accompanying letter, a list of brief definitions for each motive and job enrichment strategy was included to insure common meaning.

A third section was introduced during this round. The respondents were requested to forecast how strongly managers in the year 1990 will value a series of employee attributes or behaviors on the same three point scale. During this round participants were also encouraged to make comments as to the rationale for their predictions.

The third questionnaire again considered both job enrichment strategies and work motives from the standpoint of significance.
However, rather than requesting a relative judgment based on the present, i.e., more significant than the present, as in the second round, the respondents were asked to judge relative to the future. The instructions specified that they indicate how significant each factor will be in the year 1990, i.e., how much it will matter. This was on a simple three point scale of very significant-fairly significant-not very significant. In addition, they were requested to indicate which predictions they felt reasonably confident about (75% probability) by circling the item. The second part of the questionnaire involved the same items as the second round part two with the same instructions as the above section. Space was allowed for comments, as well, but a rationale for choices was not solicited as in the second round.

Results of Delphi. The results of this first section are shown in Table 1 which indicates the initial opinion of respondents concerning these issues. The expectations, then, of this group are that by 1990 there will be considerable enlargement of the regulatory role of government and a moderate decline of economic abundance within the American society. Organizations will be characterized as being increasingly larger, though it is not clear as to whether this increase is significantly greater-relative to the present-only slightly so. The internal operations of such organizations will emphasize innovation and creativity to a large extent, and organizational democracy and efficiency only slightly greater than today. The average work-week will be shorter with an increase of women and other minorities in the work force, though whether the increase will be great or slight is unclear. There will be some movement toward a cooperative ethic and the disposition toward self-development will remain the same. Part two of the first round questionnaire
### TABLE III-1

*Results of the Delphi Study*

<table>
<thead>
<tr>
<th>(Raw Score)</th>
<th>Increase Greatly</th>
<th>Increase Slightly</th>
<th>Same</th>
<th>Decrease Slightly</th>
<th>Decrease Greatly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Regulations</td>
<td>36</td>
<td>17</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Average Size of Organization</td>
<td>28</td>
<td>27</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Emphasis on Innovation</td>
<td>21</td>
<td>15</td>
<td>11</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Emphasis on Organization Democracy</td>
<td>15</td>
<td>25</td>
<td>12</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Emphasis on Self-Development</td>
<td>15</td>
<td>18</td>
<td>22</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Emphasis on Efficiency</td>
<td>16</td>
<td>21</td>
<td>14</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Economic Abundance</td>
<td>6</td>
<td>18</td>
<td>8</td>
<td>26</td>
<td>3</td>
</tr>
<tr>
<td>Average Worker's Hours</td>
<td></td>
<td></td>
<td>18</td>
<td>43</td>
<td>1</td>
</tr>
<tr>
<td>Minorities in Work Force</td>
<td>27</td>
<td>30</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cooperative Ethic</td>
<td>8</td>
<td>25</td>
<td>18</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Managers Need for Technical</td>
<td>32</td>
<td>18</td>
<td>9</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>...Thinking Skills</td>
<td>35</td>
<td>14</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>...Communication</td>
<td>39</td>
<td>17</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>...Human Relations</td>
<td>32</td>
<td>16</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
and part one of the second and third round questionnaires considered the participants perceptions or expectations of motives to work from three different perspectives. In the first round, respondents were requested to rank-order the top five work motives predicted to be predominant by the year 1990 (See Table 2). "Economic" motivation was considered to be the most predominant (2.26), followed by "Interesting Activity" (2.88), "Dominance-Recognition" (2.98), "Independence" (3.1), "Mastery-Achievement" (3.43), and "Social" (3.47).

In the second round, respondents were asked to estimate the significance of work motives listed, relative to today as they would predict employees would value them by 1990 (See Table 3) as being the same, and "Interesting Activity" was rated by the largest majority (67%) as being more valued by 1990 relative to the present.

In the third round, participants were asked to consider how significant, (i.e., how much will it matter), the work motives will be and, in addition, to indicate which predictions they felt reasonably confident (75% probability) The respondents considered "Economic" (77.5) and "Interesting Activity" (65%) to be very significant, "Social" (68%) to be fairly significant, while only a slight majority considered "Independence" (51%) to be very significant. "Mastery-Achievement" (49%) and "Dominance-Recognition" (47%) was seen as being fairly significant The predictions about which participants felt the most confident included "Economic" as being very significant and "Interesting Activity" as being very significant. Others were fairly well spread across the board with little significance. (See Table 4).

Thus, in comparing each round by each of the given motives, "Economic" was ranked as being the most predominant, yet, the significance
<table>
<thead>
<tr>
<th>Domain</th>
<th>Weighted Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>2.26</td>
</tr>
<tr>
<td>Interesting Activity</td>
<td>2.88</td>
</tr>
<tr>
<td>Dominance-Recognition</td>
<td>2.98</td>
</tr>
<tr>
<td>Independence</td>
<td>3.1</td>
</tr>
<tr>
<td>Mastery-Achievement</td>
<td>3.43</td>
</tr>
<tr>
<td>Social</td>
<td>3.47</td>
</tr>
</tbody>
</table>
### TABLE III-3

**Results of the Delphi Study**

<table>
<thead>
<tr>
<th></th>
<th>More</th>
<th>Same</th>
<th>Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>44%</td>
<td>42%</td>
<td>14%</td>
</tr>
<tr>
<td>Interesting Activity</td>
<td>67%</td>
<td>27%</td>
<td>6%</td>
</tr>
<tr>
<td>Dominance-Recognition</td>
<td>33%</td>
<td>57%</td>
<td>10%</td>
</tr>
<tr>
<td>Independence</td>
<td>52%</td>
<td>30%</td>
<td>18%</td>
</tr>
<tr>
<td>Mastery-Achievement</td>
<td>33%</td>
<td>43%</td>
<td>24%</td>
</tr>
<tr>
<td>Social</td>
<td>36%</td>
<td>62%</td>
<td>2%</td>
</tr>
</tbody>
</table>
### TABLE III-4

**Results of the Delphi Study**

<table>
<thead>
<tr>
<th></th>
<th>Very Significant</th>
<th>Fairly Significant</th>
<th>Not Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>51%</td>
<td>36%</td>
<td>13%</td>
</tr>
<tr>
<td>Economic</td>
<td>77%</td>
<td>23%</td>
<td>0%</td>
</tr>
<tr>
<td>Social</td>
<td>19%</td>
<td>68%</td>
<td>13%</td>
</tr>
<tr>
<td>Mastery-Achievement</td>
<td>28%</td>
<td>49%</td>
<td>23%</td>
</tr>
<tr>
<td>Dominance-Recognition</td>
<td>23%</td>
<td>47%</td>
<td>30%</td>
</tr>
<tr>
<td>Interesting Activity</td>
<td>65%</td>
<td>24%</td>
<td>11%</td>
</tr>
</tbody>
</table>
was rated as being either the same as the present or slightly more and would matter a great deal in 1990. Respondents felt very confident about the latter prediction.

"Interesting Activity" was considered to be the second most predominant work motive, was clearly seen to gain significance in relation to the present; and would matter a great deal in the future. Participants felt fairly confident that this would be the case.

"Dominance-Recognition" was ranked as the third most predominant motive to work but would remain as significant in the future as it is presently and would be considered "Fairly" significant in 1990. There was not a reasonable amount of confidence in the last prediction.

The fourth most predominant work motive for 1990, "Independence" was considered to hold slightly more significance than presently, but would be considered very significant in 1990. This prediction was given with confidence.

"Mastery-Achievement" was ranked fifth as a predominant motive, and was considered fairly significant in 1990. This prediction was not given with confidence.

Finally, the "Social" motive to work, ranked sixth, was thought to remain the same as now in terms of significance and would have a fair amount of significance in 1990. The latter prediction carried the least amount of confidence of the six motives to work.

The three rounds in regard to work motives held no contradictions. The respondents seemed to view these rather consistently. Part three of the first round questionnaire and part two of round two and three dealt with specific job enrichment strategies. As with work motives, participants were asked to rank-order the strategies in terms of priorities
in round one, (See Table 5); to estimate the significance of these, compared with today, (See Table 6), and to indicate how significant each will be in 1990, again indicating the confidence level of predictions made (See Table 7).

Part three of rounds two and three introduced and reconsidered new issues to the study. These were employee attributes or behaviors valued by the managers of 1990. In the second round, respondents were requested to evaluate how strongly managers would value each of the twelve (See Table 8), and in round three, to consider how significant each would be by 1990. Again, in this third round, they were asked to indicate which predictions they felt most confident.

Of those attributes, the greatest majority considered productivity and efficiency to be more significant than it presently is and a slight majority felt productivity and efficiency will be very significant in 1990. "Self-Motivation" was a second behavior respondents felt would be valued by managers more in 1990.

Concern for others was thought to remain the same by a slight majority and there was no definite indication of how significant this concern would be in 1990, (although more individuals rated it "fairly," a large number rated it "not very" and "very," thus, skewing any results and conclusions that might be drawn).

"Company Loyalty," "Commitment to the Organization," "Low Absenteeism" and "Non-Turnover" were also difficult to evaluate due to the across the board spread of results on the second round. Consistent with this was the round three predictions as to the significance relative to today. Most considered these issues to be "Fairly" or "not very significant."
<table>
<thead>
<tr>
<th></th>
<th>Weighted Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Content</td>
<td>2.22</td>
</tr>
<tr>
<td>Participative Decision</td>
<td>2.43</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>2.48</td>
</tr>
<tr>
<td>Teambuilding</td>
<td>3.6</td>
</tr>
<tr>
<td>More Aspects of Organization</td>
<td>4.34</td>
</tr>
<tr>
<td></td>
<td>Very Significant</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Job Content</td>
<td>74%</td>
</tr>
<tr>
<td>Participative Decision</td>
<td>70%</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>63%</td>
</tr>
<tr>
<td>Teambuilding</td>
<td>54%</td>
</tr>
<tr>
<td>Whole Picture</td>
<td>54%</td>
</tr>
<tr>
<td></td>
<td>Very Significant</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Job Interest</td>
<td>68%</td>
</tr>
<tr>
<td>Participative Decision</td>
<td>61%</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>53.3%</td>
</tr>
<tr>
<td>Teambuilding</td>
<td>28%</td>
</tr>
<tr>
<td>Whole Picture</td>
<td>36.4%</td>
</tr>
<tr>
<td></td>
<td>Very Significant</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Company Loyalty</td>
<td>40%</td>
</tr>
<tr>
<td>Productivity</td>
<td>72%</td>
</tr>
<tr>
<td>Cooperation</td>
<td>52%</td>
</tr>
<tr>
<td>Personal Growth</td>
<td>54%</td>
</tr>
<tr>
<td>Commitment to Organization</td>
<td>35%</td>
</tr>
<tr>
<td>Independent Thinking</td>
<td>51%</td>
</tr>
<tr>
<td>Low Absenteeism</td>
<td>47%</td>
</tr>
<tr>
<td>Self Motivation</td>
<td>66%</td>
</tr>
<tr>
<td>Creativity</td>
<td>52%</td>
</tr>
<tr>
<td>Honesty</td>
<td>46%</td>
</tr>
<tr>
<td>Non-Turnover</td>
<td>28%</td>
</tr>
<tr>
<td>Concern for Others</td>
<td>30%</td>
</tr>
</tbody>
</table>
"Cooperation" was seen to be between remaining the same and being more significant than, as was "Personal Growth," "Independent Thinking," "Creativity" and "Honesty." Each of these issues were generally divided between being "fairly" and "very significant" in the context of 1990.

Work in America Institute

The Work in America Institute, Inc., was founded in 1975 for the purpose of advancing productivity and the quality of working life in the United States. The Institute sponsored three national symposia held in New York, Chicago, and San Francisco in 1977 and 1978 in which more than 300 leaders from industry, government, labor, communications, and universities participated.

This group's forecasts and recommendations were published in 1979 in *Work in America: The Decade Ahead*, edited by Clark Kerr, formerly president of the University of California and presently serving on the board of the Work in America Institute, and Jerome M. Roscow, the president and founder of the Institute. The results were drawn from the deliberations of participants in a series of workshops which involved debates and discussions and were ultimately revised in a final plenary session in each of the three symposia. The workshops were designed to identify problem areas and changes that would occur in this country during the decade of the eighties. Two general areas of concern evolved during each of the symposia: the work force and the work environment.

National/Organizational Climate. This group felt that we are hanging in our ideologies from those focused on individualism, property rights, competition to satisfy consumer desires, and scientific specialization to communitarianism focused on duties of membership, community needs, interdependence, and holism.

The authoritarian climate of the work place is no longer considered
a valid means to promote productivity. Efficiency will begin to be thought of in terms of humanistic criteria rather than simply economic.

The federal government's role is seen to be one of expansion toward 1990. It will serve a larger role as arbitrator for employer-employee relations to insure satisfaction of public expectations and democratic values that will be increasingly emphasized. Other forces identified for greater federal government involvement include the need for environmental protection, the cost of retirement benefits will force attention to integrating private pension programs with Social Security, the advent of some form of national health insurance; and mounting pressures for better channels between education and the work place.

A "quality-of-life" society is seen to be formulating in which attention is given to the environment, health, culture, public affairs, the development of self and meaningful relationships with others. In such a society, work takes on a secondary position. This implies a greater intelligence to invest in social rather than economic progress.

The economy is described as becoming one of service. This shift in itself is often cited as a major source of decreased productivity. It is thought, however, that the continued movement to service type industries will not have any appreciable effects on the growth of productivity should not remain a secondary concern but that individual and organizational slack can be reduced by tapping individual productivity.

Technology. The "soft" technologies of decision-making, problem-solving and planning received a great deal of attention by the symposia participants. It was felt that there is, and will continue to be, a clear demand for more participation in the decision-making process at the work place. This kind of demand is recognized as being much more
difficult to satisfy than are direct demands for pay and benefits. Economic demands are tangible and straightforward, whereas, demands to participate require a new managerial style that is generally foreign to this society.

In regard to both hard and soft technology, the point was made that, prior to the present, equipment and process technology has been the prime determinant of working environments. Specifically, the technology affects the operating policies and practices which created the environment to which the workers responded with satisfaction or dissatisfaction. The emphasis for future appears to be becoming almost reversed. At least joint significance should be placed on employee expectations and the principle technology.

Structure. This group agreed that the structure toward which organizations are moving is due to new demands and new needs. Both in terms of actual organization and time structure, the need to be fluid and flexible is emphasized. Due to the mounting evidence that we are developing into a service economy, it seems necessary to become more decentralized. For information sharing and decision-making this will be an important consideration. Provisions for more and better mechanisms for sharing power such as task forces, labor-management committees, work councils, autonomous work teams, fewer levels of hierarchy, and "linking-pin" arrangements will receive a great deal of attention during this decade.

During the 1980's, it is forecasted that we can anticipate more and more applications of alternative work schedules. One of the more popular applications, perhaps, will be the part-time job in response to young people, women, and older workers. Staggered hours or flex-time will be
a second important application. Indications are that this concept will be exceptionally popular and increasingly utilized over this next decade. Along with these, the four-day work-week will be a third variation that this group recognizes as an important consideration.

Nature of People/Values. The emergent work forces, or the "New Breed" of Americans, are of the opinion that their aspirations for self-fulfillment cannot be satisfied through conventional success. This "New Breed", constitutes a full 52%, is younger, better educated and feels obligated to give more attention to their own needs rather than what others expect of them. "New Breed" values manifest in the working world through: the increasing importance of leisure, the symbolic significance of the paid job (for women), and the insistence that jobs become less de-personalized.

Reasons for some of the work value shifts that were given include, along with being better educated, the sex and age of the workers. Women have increased in numbers in the past decade and it is foreseen that this growth will continue. Women have generally placed greater importance on social and emotional considerations than men.

The Work in America Institute has concluded that younger employees will place greater importance on intrinsic job factors than would older employees. Thus, more younger (an increasingly large proportion of the work force) employees are motivated by "higher order" needs for achievement, self-expression, and self-control.

The Institute admits that hard data concerning time trends in work values has been scarce, indeed. However, the opinions of numerous social observers were cited as support that the trend toward the need for intrinsic motivators is surfacing. Personnel consultant, Robert
McMurry, is reported as declaring that permissive attitudes are replacing
the Protestant work ethic. (New York Times, October 2, 1970). Harry
Bernstein, Journalist, observed that work is treated more casually than
it has been in the past. (Washington Post, January 1, 1973). Psy-
chologist, David Whitsett suggests that workers are more concerned with
emotional and social values than with the economics of their job (Journal

Institute for Futures Studies

Gary Gappert is the Director of Institute for Futures Studies and
Research and Professor of the Department of Urban Studies at the Uni-
versity of Akron. His book, Post-Affluent America, 1979, is an inves-
tigation into social and economic trends of the future in which the im-
plications for life, work and American Institutions are examined. It is
said to be a substantive contribution to the debate on futures growth,
work, values and social services. Gappert concedes that to predict
what the values of our society will be in 50 years may be difficult. Yet
he argues that these future values are already present in predominant or
deviant forms. The stated purpose of this book is to suggest that, due
to the emerging values, two areas for policy development should be heav-
ily evaluated: work reforms and greater personal control over social-
economic behavior. "The decade ahead will be a time of social turbu-
ience as America attempts to reconcile economic necessities with new
social demands. The struggle between different social and economic doc-
trines, beliefs, and values will continue and accelerate. Social In-
stitutions will need to be more responsive and economic institutions will
go beyond the market forces by attempting to deal with areas of social
responsibilities and the human dimensions of economic participations."
National and Organizational Climate. Post-Affluence is a condition caused by the transition of our society from illusions of affluence in the mid-20th century to realities of a steady state and slow growth condition. It is influenced by post-industrial technology and a service work force and the emergence of a post-macho culture. Post-Affluence is Gappert's label for the climate of this decade. The economy in this Post-Affluent era is an emerging service economy which emphasizes tertiary economic activities-i.e., transportation, insurance, finance, management, and real estate.

Growth of our economic system will slow. Inspite of the possibility of significant economic dislocation, though, the U.S. economy still has substantial growth, the possibility of politically induced crisis of international supply, development of real securities for certain commodities, and the ideological unwillingness to provide government with significant planning and intervention authority will tend to result in a "stop and go" economy. "The economy of the U.S. is undergoing a metamorphosis from 'adolescent' and a long spurt of growth fed by fulfillment of a set of rising expectations to a mature, steady-state that needs to concern itself more with the maintenance of proper balance."

Four characteristics of this transitional period are

1. Aggregate growth will slow, there will be rapid changes in the structure of the economy,

2. The shifting of resources will cause economic hardships for some and windfall gains for others. This will cause social discontent and debate over programs to mitigate income inequably will increase,

3. Resources to cushion groups from economic hardships will be more difficult to attain,

4. Individual lifestyles and values will continue to change."

2
Democracy and the democratic decision-making process should be perfected during this era. There will be a growth of Anti-authoritarianism, a rise of charismatic appeal and a decline of willingness to submit to arbitrary authority. Government regulation will be a dynamic factor having a strong effect over the social economy of the Post-Affluent transition. There will be question of the effectiveness of the public sector and its lack of long range planning. It is unclear how the federal government will control consumer tastes in the decade ahead and it is likely that new controls will evolve for the allocation of natural resources and the development and diffusion of new technology. "Controls of several kinds on corporations will continue...the effectiveness of those controls to represent social values may increase and their ineffectiveness to represent economic values will probably increase." Productivity will be considered in terms of balance, slow growth, and a steady state concept. There will be a shift in Post-Industrial society to new sources of productivity, summed up as information and organization, by means of which the service sector becomes the dominant sector in the economy. Productivity in terms of innovative work forms will prevail. Innovations will have to increase if productivity demands are to be met. Emphasis on maintenance efficiency vs production efficiency will follow this trend. Overall corporates will probably be the primary influence on the achievement of a more innovative approach to manpower development.

Technology. Post-Industrial is best described in the listing of Daniel Bell's five principal elements:

1. Change to service economy;

2. Pre-eminence of professional and technical jobs;
3. "Centrality" of theoretical knowledge as primary innovation and policy;
4. Control of planned growth and development;
5. New kinds of computer based systems for management.

"Post-Industrial" involves the technology of computers and communication involving new advances in instrumentation and automation and numerical controlling systems. This technology is not complex and society will be more dependent upon it.

**Structure.** More free-form management teams in regard to communications and authority should dominate the post-industrial mode of organization. The hierarchical separation designed for the industrial era would result in management being cut off from vital information flows. There are many forces in society in favor of more flexible work scheduling. Increased opportunity for part-time jobs, flexible hours, and job sharing are viable alternatives. Yet, Gappert recognizes that there are substantial institutional barriers to changing the nature of work, with more reasons not to change than to change.

**Nature of People/Values.** The recognition of the need for a synergistic or balanced life in that emphasis on rewarding work, productive intimacy, and satisfying leisure are fairly equal is a predominant value of the present and near future. Theoretically, a synergistic life style develops complementary forms of self-fulfillment and self-expression in different life activities. The synergistic life style stresses human growth and innovation in terms of life and work options. Gappert both predicts and advocates such values.

As a result of the increase of affluence (by 1980, 38% of all families had an income over $15,000 in real 1970 dollars), to a large
degree, the leisure ethic has evolved. Gappert is convinced that this ethic will be reflected in a trend toward three day work-weeks and part-time employment.

Demographic trends for the next ten years include:

- A large number of workers between 24 and 34,
- Better educated and probably trained for a craft or white-collar position,
- An increase in minorities and women,
- A larger part-time labor force.

Because, by 1985, it can be expected that almost half the working force will be women, the emerging social forces might be described as "post-masculine" or "post-macho." In relation to work, the following might be expected to emerge.

- De-emphasis on physical strength,
- Legal supports to enable women to compete more successfully,
- New positions of assertiveness and independence for women,
- A decline in the effectiveness of the military,
- The growth of the matrix style of management, essentially a dual-authority form of management similar to the two-parent family model,
- A release of additional creativity as the "new male" emerges and achieves greater acceptability.

Gappert declares that this society is going to become much more androgynous with a "more balanced set of values" which will pre-dominate in our institutional arrangements.

Kiplinger Washington Newsletter Exposition

The December 26, 1980 issue of the Kiplinger Washington Newsletter featured an exposition of the rest of the present decade.
Changes in the business climate were the population, the work force, living standards along with technology. The Newsletter used the Population Reference Bureau, the Census Bureau, Brookings Institute, the Federal Reserve Board, American Enterprise Institute, Stanford Research, along with the Department of Housing and Urban Development, Labor, Commerce and Energy, as their source of information in projecting changes.

National/Organizational Climate

The economy will, generally, shift from that of heavy industry to high technology and services. Growth will pick up about 1983. The present rate of inflation is slowing down business at present, and, until inflation slows, the government will continue to regulate growth.

Productivity will lag from the beginning of the decade and increase toward 1990. Employment is on the rise, unemployment on a gradual decline.

Technology

Communications, electronics, computers and high-technology firms which emphasize research and innovation will dominate the marketplace. It will be an economy of high technology and services.

Structure

The work-week is seen to decrease by only a few hours, at most. The four-day week will probably not catch on as some predict. The flex-time concept is more likely to be utilized whereby employees will be able to select their starting and quitting times within reasonable parameters and according to the type of organization. Part-time jobs and job sharing will also be popular features effecting the structure of organizations in terms of time by 1990.

Nature of People/Values.

Those between the ages of 25 - 34 years and 35 - 44 years will increase by five million and eleven million
respectively. This will mean that there will be fewer young job seekers. The total work force, now one hundred five million, will increase to one hundred twenty-two million by 1990. At that time, 75% of the women from 25 - 54 years will be in the work force, an increase of 10% from now. The total labor force will not, however, grow as fast as during the 70's.

There will be a shifting of attitudes from those of "spreading the wealth" to those emphasizing work, output and growth. There will be a tending toward more traditional work values.

Lefkowitz and Associates
Labor-Management Committee on the Work Environment and Productivity

Gary Lefkowitz, President of Lieb, Lefkowitz and Associates, Inc., and heading up the Joint Labor-Management Committee on the Work Environment and Productivity, New York State, presented the following report at the First Global Conference on the Future in the summer of 1980. The presentation was compiled from his experience in making on-site visits to workplaces throughout the country where work innovations are being conducted. The work site visits were conducted under the auspices of the National Council for Alternative Work Patterns, Inc. Mr. Lefkowitz combines his own experience with the growing body of literature on the future shape of society and has analyzed these assertions in the following sections.

Climate. On a global scale, interlocking economic relationships, interdependence on the availability and use of scarce resources and equitable distribution of these resources will be greatly expanded. Our society is moving away from an unbridled, materialistic economy toward one characterized by producing and consuming in relation to human needs and to the preservation of people, resources and the environment.
We are experiencing the relative decline of manufacturing as the primary motive force of the economy. As early as 1985, we shall be able to produce all the "things" our society needs—all the food, fibers and ore, all the buildings, all the machines and consumer products—with less than a quarter of our work force, or less than 10% of our population.

The major growth area of the post-industrial society will be the service sector of our economy—education, communications, health care, leisure and cultural activities, the professions, government and nonprofit institutions.

Technology Breakthrough and technical advancements in biological sciences, micro-electronics, computer, communications and robotics will have the following effects:

1. People will not have to do many of the more menial, unpleasant and dangerous tasks. They will be doing more intellectual and creative work.

2. Instead of working in a paperbound office, future generations will be working in an electronically-run (paperless) office.

3. The need to have everyone in a central location to work together in producing goods or providing services will be decreased. For example, word processing/computer/communications systems could be as easily installed in the home as in the office. Technological information systems could be located in various geographical locations shared by many companies. People working side-by-side could be employed by separate companies providing the same or different services.

4. Due to technological advancements, growth in the service sector will be accompanied by a drastic restructuring of occupations. There will be a decreasing demand for such occupations as bank tellers, secretaries, retail salespersons, telephone operators and postal workers. Co-incidentally, these are occupations in which females tend to be most highly
concentrated. On the other hand, there will be enormous growth in the so-called "knowledge workers"—technical, professional, managerial and administrative occupations.

**Structure.** Surveys have shown that what current American job holders want most from their jobs are opportunities to grow, freedom to set their own pace and the right to influence the decisions that affect them.

Concurrently, managers are moving away from the turn of the century strategy based on the assumptions that workers have to adapt to the work environment and are essentially passive agents to be manipulated and controlled by the organization. Managerial strategy is increasingly being guided by the belief that workers should have the opportunity to shape their work environment and to mesh workplace demands, individual needs and family responsibilities. Accordingly, more and more companies are changing their personnel policies and modifying their benefits to allow for such innovations as working at home, flexible work arrangements, sabbaticals, mid-career self-inquiry and social service assignments.

**Nature of People/Values** Women have been entering the labor force in massive numbers, and the increase in their participation rate is expected to continue. In the last three decades, six out of ten additions to the labor force have been females. Presently, over 40 million women are in the work force or approximately 42% of the total. Women will continue to be a prime source of pressure for flexible work arrangements aided and abetted by the growing number and politically active elderly and handicapped segments of the labor force.

People in our society are becoming far more concerned with the
quality of the human experience and far less with the unlimited acquisition of physical goods and products. This desire is expressed in the quest for personal growth and self-fulfillment.

Family arrangements and role definitions are changing radically. The standard model of breadwinner-father, homemaker-mother, and their dependent children is today characteristic of no more than one out of six households. Contrast this "model" household with the fact that more than 50% of all families have working wives, and by 1979, one out of seven families was headed by a woman who was divorced, separated, widowed or never married. Increasingly, we find individuals testing social arrangements as the house-husband, female bread-winner, new modes of child care and voluntary childlessness.

The United States has become an aging society due to a parallel drop in the birthrate and an increase in life expectancy. Anticipated breakthroughs in our understanding of human biological and biochemical processes could lead to a life expectancy of 100. One implication of this aging process would be a re-definition of a career characterized by lifelong work in a single occupation following schooling to one consisting of multiple careers and alternation between schooling and work.

Working in The 21st Century

Working in the 21st Century, edited by E. Steward Sheppard, Dean of the Colgate Darden Graduate School of Business Administration (University of Virginia) and Donald C. Carroll, Dean of the Wharton School (University of Pennsylvania) is based on the conclusions of a symposium co-sponsored by the Colgate Darden and Wharton Schools and funded by Phillip Morris Incorporated during the spring of 1979. The symposium included 350 spokesmen from business and labor (e.g., The Sun Company,
Inc, G. E, and Citibank), government (e.g., AFL-CIO, and Futures Research Congressional Research Service), science (e.g., Hudson Institute, and academy of Machinists and Aerospace) and higher education (e.g., University of Texas, North Carolina, South Carolina and Princeton) Although the symposium was aimed toward issues in the 21st century, the territory of the 1980's was necessarily covered in the process.

**Climate.** One of the dominant factors which will shape the work world of the future will be the growth, both in size and in involvement, of government. Pressures for an increase in the role of government as manager or regulator of the economy will rise.

There has been a decline in the growth of productivity in terms of goods. Between 1947 and 1967, productivity in the private sector rose at an average of 3.2%. By 1977, that rate had fallen to 1.6%. There is a strong probability that productivity will remain relatively static toward the turn of the century. However, one of the possible economic advantages of the electronic age (of which we are forecasted to be entering) will be an improvement in the productivity of the service sector. The economy will increasingly be one in which growing attention is devoted to service industries, leisure and personal pursuits.

**Technology.** The experience from preceding decades would lead many to believe in the technological imperative: if something can be built, it will be built. We have, however, been disillusioned by the way many technologies have generated unforeseen and dire social or environmental consequences. Responses to technological side effects have been demands for the social management of technology and a rising anti-technology. Developing concepts, procedures, and institutional forms to set goals,
to plan strategies and to develop institutions to achieve them as social technologies. Yet, social technologies lag hard technology by many generations. The soft technologies of greater participation in decision-making will receive a great deal of emphasis.

**Structure** Decentralization should be highly utilized in organizations of the 1990's. Flexibility will be the keynote of work arrangements. Not only will millions of workers be allowed to set their own starting and quitting hours, but there will be opportunities for job sharing on a systematic basis. Sabbaticals and mid-career self-inquiries will be popular options.

Increasingly important in the decade ahead will be to develop innovative ways for repackaging work. Variations of the nine-to-five conventional workday, a shorter work-week, work sharing, permanent part-time employment, staggered hours and the task system. Autonomous work teams and rotated leadership should bring a greater sense of involvement which will be important.

According to Franz Schurmann, University of California professor and Sandy Close managing editor of the Pacific News Service, we are becoming a nation of traders, information-processors, and providers of services. Therefore, development of the information sciences will encourage the movement of information rather than people. This could have a profound effect on organizational structure.

**Nature of People/Values** A larger majority of people are being described as "Individualistic" or more for themselves and less willing to suppress their talents and opportunities. We have moved into an age where emphasis has shifted from collective action to the person. Also a
relative decline in the importance of financial incentives, although these are still valued.

The individual's ability to manage his own time will be at a premium and should mesh well with the individual's need to be involved and in control. The independence need instills a desire to take greater responsibility.

There is a changing character of the work force. Non-white minorities will grow from 12% to about 20% by the year 2000. Females will constitute at least half the work force by the mid-1900's. The average age will increase and the baby-boom-bulge moves well into their middle years and are secure in the work world. And, perhaps most significant, the size of the force will decline from the average annual increase of 2% to 1% between 1985 and 1990.

*Western Behavioral Institutes*

*Issues in America in the 1980's*

The Western Behavioral Sciences Institute published "Some Issues in America in the 1980's," in December 12, 1978, by Rosemary J. Erickson, Vice President of Research. This report was prepared as a part of the Institute's planning for the 1980's. It was a result of a survey of the social science literature and media, contracts with government agencies, corporate managers, planners in health care, schools, research, and others in the general citizenry.

Climate. The most booming industry of the future may well be the regulatory business. Accountability has been an issue and this trend will grow throughout the 80's. Government will be our principal regulator.

A fiscal conservation will continue to sweep the country. According to Erickson, "The value of the dollar is already at a near all-time low,
we are living with unacceptable levels of inflation. Proposition 13 fever has struck the country, and two interpretations are being given to it—that people want less taxation and less government. The question of responsibility-accountability applies here. Who is to blame for the state of the economy? If government continues to regulate the requirements of accountability, a climate of high tension will be created.\textsuperscript{10}

Technology. Relative to Japan and Germany, the United States is no longer number one technologically in industry and manufacturing. In fact, because of problems with unionization and unrealistic demand on management, many larger industries have moved to foreign countries.

Agriculture has become an area that we are markedly technologically superior. Issues around arm policies and rewards for the stockholders will surface more and more in the decade ahead. Foreign companies and investors will continue infiltrating the United States as we have done foreign industry in the past.

Structure. The failure or near failures of many American industries and companies has caused many (such as aircraft and electronic industries) to diversify and conglomerate. The result is a situation in which the bigger, better, and stronger stand a better chance of survival. In this climate of centralization, a smaller operation may be squeezed out. On the organizational level, issues of job restructuring, sharing, and shorter work-weeks will prevail.

Nature of People. Problems of employee relations are the result of a change in societal norms and values, away from the pride of the individual for his work and loyalty to the company. New values, however, have not replaced the old Protestant work ethics according to this report. To address these issues, forecasters are looking to questions of a shorter
work-week, job sharing, and job restructuring where the individual has more to say about the nature of his work. Companies are considering greater benefits and questions of motivation. Some companies are already concerned about job stress and its relationship to physical and mental illness.

Companies are looking at the Japanese and German industrial complexes where the company is the family, and looks out for the health and leisure time of its employees.

Minorities in the workplace were an issue of the 70's and we might expect a backsliding as the pressure for hiring eases in society. The issues of women in non-traditional jobs and in management, however, are just surfacing and will, undoubtedly, be prominent.

The values that prevail are centered around the "I'm looking out for Number One" syndrome. We have been labeled the "Psychological Society", where the priority is personal well-being, security, and personal enhancement. This is evidenced by the non-fiction, self-help books which are at an all-time best-selling record high. "Looking out for Number One" easily replaces altruistic values such as concern for the poor, minorities, and the educationally disadvantaged.

Pressures for the protection of the rights and privacy of individuals will continue to increase. It has already created an onslaught of accountability procedures, freedom of information, and government regulations and monitoring to insure such rights.

There is a change in the American conscience, "characterized by a rip-off quality in many American's thinking...a feeling of others doing wrong, so why shouldn't they." This type of situation snowballs and
results in the rationalization of unethical activities. This is not to say that this will be the case. Issues concerning ethics will continue to surface throughout the eighties which will necessitate a national examination of our consciousness and value systems.

Institute for the Futures—
The Future of Management

Roy Amara, President of the Institute for the Futures and a leading future researcher, wrote and published a 1980 report entitled, "The Future of Management Ten Shapers of Management in the 80's." The purpose of the report was to explore how management is likely to be influenced by economic, social and technological changes resulting in changes in the information environment, in decision-making styles, and changes in the dominant "management culture." This was done primarily as a result of looking for patterns and distinctive features from a variety of perspectives and sources of information.

The question which stimulated such an effort was, "How can we possibly train managers, improve decision-making, design management information systems, or make organizations more effective?" The Institute, founded in 1968, was the first major futurist "think-tank" and is located in Menlo Park, California.

Climate Slower economic growth (2%-3% per year) is expected. The resumption of productivity gains will become a major management focus of the 80's since the United States has fallen to the bottom. Managers will need to be innovators in spurring productivity gains—especially in the growing service and information-handling sectors. More stress on social accountability is expected. Managers will have more contact with a variety of external groups, including representatives of the various media.
The changing employee information and communication environment is part of the larger changing "participatory" environment. Individuals will insist on "wanting in" on decisions affecting their lives.

The emphasis will be on the need to create an environment of high creativity and innovation and to manage complex projects more efficiently.

There will be increasing government involvement in the private sector, with greater public pressure for explicit measures of accountability for government organizations and with increasing sensitivity to "public interest" consequences of choices.

Technology. The eighties will be considered to be dominated by an information environment with the "soft" technology of more effective decision-making and long range planning playing key roles. Specifically, decision analysis, risk analysis, interactive modeling, and simulation will be popular options. New coordinating mechanisms and more explicit measures of work performance will be essential. Computer communications will be heavy including such methods as video, slow-scan, audio, and computer conferencing.

"The automated office will, almost certainly, become a reality in many parts of United States business as a host of record keeping, accounting, report writing and reporting tasks are performed by integrating networks of intelligent terminals, word processors, fax machines, copiers, and electronic mail systems."

Structure. New management structures that can accommodate unprecedented numbers of potential managers will serve to flatten organizational pyramids and create smaller autonomous work teams, and facilitate decentralization in general. The smaller, more decentralized,
more flexible organizational management unit will have the advantage, "Indeed, Smaller may be more beautiful." Rapid introduction of computer communications into the work environment, coupled with the continued growth of the information sector will change our notions of what constitutes "the place of work." The home/office boundary need no longer remain sacrosanct, and a variety of work styles—part-time, consultants, "in andouters" into the workplace—can be accommodated.

The existence of a multiplicity of net workers—horizontal, level jumping, up as well as down—can make for improved organizational stability.

Nature Movement of the baby-bulge group, born between 1945 and 1965 will limit the development of new management opportunities. There will be a decline in growth of the labor force (from 2% in the 70's to 1% per year in the 80's) and a slow-down of participation rates for women. But an increase in management ranks is expected. There should be higher turnover rates than normal.

There is a calling for a re-definition of leadership vis-a-vis the evolving needs and perception of employees in the 80's, i.e., a variety of values and lifestyles. Because there will be more households with two wage earners, the desire for meaningful work will become even more pronounced—they can afford for it to be. There will be an increasing premium placed on individual competence (productivity, efficiency) and self-reliance (independent thinking).

This kind of environment must necessarily focus attention on employee motivation with the growing importance of non-economic rewards and must be tuned to individual differences and needs.
The Center for Future Research—Employee Entitlements in the 1980's

The Center for Future Research (CFR), founded in 1971, is dedicated to research into the causes and directions of social change. The results are designed to assist corporate and public agency managers by providing

1. Forecasts that can serve as a basis for assumptions about alternative futures,
2. Innovation organizational processes for formulating and implementing long-range strategies; and
3. New methodologies and information systems to help organizations structure their thinking about the future.

The CFR is the only future research institution established within a university school of business administration (Graduate School of Business, University of South Carolina) and dedicated principally to the advancement of organizational strategic policy making. The 1979 report, "Employee Entitlements in the Eighties," is a summary of a 200 page working draft, five lengthy background papers, and a Delphi inquiry that contains forecasts on more than 100 items related to worker entitlements. The study was jointly sponsored by 19 corporations including The Atlantic Richfield Corporation, Dow Chemical, Exxon, General Electric, Monsanto Company, and Xerox Corporation.

"Employee Entitlements in the Eighties," by James O'Toole, Kenneth Brousseau, and August Ralston, was concluded December 1, 1979 as a final report to a number of related studies. The rationale for such a series is observations that, in the past century, the United States has been experiencing a long-term trend in which personal needs and privileges are transformed into social rights. What once were viewed as valuable benefits are seen as indispensable rights, not given but owed. What once were viewed as individual and family responsibilities are now seen as inalienable obligations of employers or the government. The domain of
entitlements continues to expand as demographics, institutions, and values of the society change. The balance between government and private business as the primary agent for providing these new-found "rights" may also be changing.

**Climate** The decreasing productivity/labor cost ratio is explained by the rapid influx of marginal workers marginal in the sense of different work values and expectations.

Few economists expect the United States to return to high rates of growth. There is now a mismatch between the philosophy and organization of work on the one hand and economic reality on the other. Symptoms of this mismatch include high inflation, low productivity and declining innovation.

Along with the shift towards service and knowledge work, individual efficiency and the attitude of caring about one's work will become vital. Greater self-discipline and self-motivation will be greatly desired of the members of the near future workforce. The role of government is that of the guarantor and enforcer. It is likely to extend its influence on the workforce by becoming the employer of last resort.

**Technology** The "soft" technology of decision-making was the only technical area mentioned in this report. It was ranked as fourth in a long list of areas requiring greater focus for future.

**Structure** Because of the mismatch mentioned earlier, organizations must be structured to tap the positive values and traits of young workers, i.e., ability to change, flexibility, variety, choice and diversity. This means a desire for freedom from close supervision. Jobs will have to be structured along part-time and flex-time lines to facilitate movement of women into the workforce.
**Nature of People/Values**  
Demographically, women will represent a larger proportion of the work force. Minorities and older workers will also add to the ever-increasing percentage of the total population entering the work force.

As a result of the changing fabric of workers, values seen as rights which are likely to be reflected in organizations by 1990 include:

- The right to vote on plant relocations,
- The right to choice of appearance,
- The right to participate in all decisions directly affecting one's job,
- The right to self-actualization on the job (i.e., to develop one's full productive potential)
- The right to adequate leisure time (i.e., time with one's family),
- The right of all employees to full access to information about corporate activities.

Cited in this report was a report done by a team of University of Michigan researchers in which the number one problem concerning one-half of employed Americans was that of inflexible work schedules. Part-time jobs, flex-time, and job sharing will be likely options offered in response to these concerns throughout the eighties. The Department of Labor found that 70% of American workers would be willing to give up 2% or more of their income for less time at work.

Money, as a primary motivation, will no longer be as effective. Loyalty, commitment and motivation, as we have come to know it, is on the decline. "Looking out for Number One" is a prominent trait of the new culture rapidly filling the ranks. Responsibility for quantity and quality of work will decrease in proportion to the increasing percent of this culture's employment activities. Taking the initiative has decreased and attitudes toward fellow workers, supervisors and customers have grown less considerate or more selfish.
First Global Conference in the Future—
Work and Careers

Mr. O'Brien, Internal Consultant with the United States Department of Labor and Chairman of the Center for Future Management, Washington, D.C., recently organized the "Work and Careers" track for the First Global Conference in the future

National/Organizational Climate. The single most important challenge to managers of people in the 1980's is a phenomenon O'Brien calls the evolution of employees choice. There is ample evidence that the pace of that evolution is accelerating. There is increasing recognition by employees of the paradox of an autocratic workplace within a political democracy.

Due to the increasing size and complexity of organizations, people will tend to feel like "cogs in a wheel." Realizing the choice between the democratic ideal and the subjugation of organizational complexity will create a unique stress during the eighties.

Technology Trends that will affect the work place include

- Technology growing at faster rates than people can adapt to and use effectively causing stress,
- Increasing complexity in administrative processes—more participants and conflicting goals and interests, increase laws, procedures and paper work,
- Information overload,
- Unchallenged pressures for growth and use of technology regardless of consequences like pollution, human stress,
- Desire by workers for wider participation in decision-making,
- More temporary task forces/projects to get job done,
- Knowledge and skills become outdated within a short span of years

Structure Trends identified by O'Brien as important include

Flex-time and other alternative work schedules permitting the choice of when to work,
- Autonomous work groups and other self-management devices permitting the choice of who does what and how
Nature of People/Values

Important trends include

- Call for democratic vs. autocratic leadership,
- Increasing educational levels and awareness of what is happening in the world of work,
- More diverse types of people working together,
  People so specialized that they don't understand "big picture" or are not able to communicate effectively with others,
- Desire for independence and self-expression,
- Increases in leisure time

The Trend Analysis Program—
American Council of Life Insurance

The Trend Analysis Program is published by the American Council of Life Insurance. The Institute of Life Insurance conducted a Future Outlook Study in 1967, to assess significant social and political trends because it was apparent that reactive management styles were not appropriate in the rapidly changing climate. One of the results of the Future Outlook Study was a need for a continual means by which the insurance business could keep up with the emerging ideas and social changes. In 1970, the Trend Analysis Program (TAP) was designed and set up as an early-warning system for social changes. TAP has continued to operate sponsored by the American Council of Life Insurance and the American Life Insurance Association.

TAP is based on the concept that various changes in society are the result of changes in ideas and that publications are a principal means whereby ideas circulate through society. Over 100 publications are monitored by TAP in a search for influential ideas. TAP also synthesizes the information now available from other futures research efforts and fields such as technology forecasting. TAP is unique in that it was the first industry-wide participating futures research effort.

The screening function is voluntarily carried out by 100 insurance executives who "monitor" a wide range of periodicals. The role of the TAP monitor is being seen as a training opportunity in policy formulation.
The monitor reads specified publications and make note of any articles which involve an idea or event that indicates a trend or shift and contain implications for long-range policy. They will, then, summarize these articles. These abstracts are then analyzed every two months by a committee of staff members. The reviewed, and often combined abstracts, are used to prepare TAP's Trend Reports. Eighteen such reports have been published to date. They range in topic from "Aging and the Aged," to "The Changing Nature of Work." The following forecasts have been drawn from a content analysis of the entire series of reports.

**Climate.** The only report that dealt with an overall climate was TAP #12, "A Culture in Transformation Toward a Different Societal Ethic." This report was an attempt to address the complexity of economic and social trends that precede our present condition and to trace the changes in the future. The near future or "interim" years describe some rather pessimistic projections in terms of employment and technology for the next two decades. Underemployment will be a problem as it is relative to a better educated people. Technology will be scrutinized more carefully to avoid second order problems developing out of the new technologies.

The implication is, though more as a prescription than as a prediction, that the regulatory function of government would lessen in the near future in lieu of a "greater institutional capacity to take the initiative in promoting necessary policy changes."

**Technology.** Throughout several of the Trend Reports a relative decline in United States technological dominance, and a growth in worldwide rivalry for technological supremacy will continue to prevail...
Computer technology and information communication systems received a great deal of attention throughout the reports as the major areas for technological advancement. Information technology will be employed to an increasing extent in the business world to deal with consumerist pressure for better product and service information. Public mistrust of commercial messages in a second pressure for business to revamp their communications. Use of multi-media public relations presentations to a variety of publics (community, club and classroom groups) will be utilized to provide information in regard to the role of business.

Home-to-office cable link-ups enabling managers to work at home, meeting run by closed-circuit teleconferencing networks, and home-centered information centers for personal financial planning were cited as options in the area of communication in the decade of 1990.

Described by TAP as one of the most promising fields in information technology is simulation or computer modeling whereby assumptions related to current trends, future alternatives, and economic projections can be programmed into a model.

The "soft" technology reported by TAP to be receiving a great deal of attention in this decade is that of the decision-making process.

The most recent TAP report (Summer, 1979) is devoted to this issue.

Trends that have created present decision-making patterns include increased centralization of authority, greater organizational complexity, more emphasis both on specialization and hierarchies to organize work (all of which) might seem destined to continue for the next few decades. (Except for) two seemingly unrelated developments, noted by TAP, (which) could produce profound counter-forces to (these) trends.

The first of these is the cultural transformation associated with changing attitudes toward authority. Various illustrations of this
attitude (criticism of professionals such as doctors and lawyers and the diminishing faith in institutional decisions) together demonstrate a challenge to the legitimacy of institutional decision-making processes.

The other trend is the revolution in communication and information technologies. TAP recommends that we must wait to see whether this will lead to decentralization of decision-making or whether decision-making will be controlled by fewer people.

**Structure** Structure in terms of time was considered in two TAP report, "The Employee" (1973) and "The Life Cycle" (1974). Any changes in this area were seen to be the direct result of value changes of the employee. In answer to the question, "How can jobs be revamped to accommodate some of the changing needs and values?", four-day work-weeks, flexible hours, part-time employment for persons in professional-level positions, contracts, similar to those offered in consultants which are renewable at three, five or ten-year intervals and one-or-two-year leaves of absence for women who want to have children and then resume careers were offered as viable options in future.

**Nature of People.** TAP report #7, "The Employee", explores trends which could reshape attitudes and consequent output of the employee. According to this report labor is becoming a younger movement now and is more interested in obtaining social benefits, higher pay and job enrichment. The relationship between a worker and his company is changing in that in the past the employee saw himself as working for the best interest of his company and now the attitude has shifted to one of serving himself and society before his employer.
The prediction is that there will be a conflict of values in regard to time and leisure. There are those who desire a higher standard of living and will be willing to assume a second job in order to achieve that goal. A large proportion, on the other hand, will feel that the pursuit of one's real interests at less monetary gain is more valuable than earning high salaries while doing something less fulfilling. Recognizing in which group a particular employee will fall, or on what point on the continuum, will be a tremendous challenge to management in future in determining what way to motivate his/her employees.

**Project Forethought**

"Forethought" is an informal network of corporate planners and others who have a connection or an interest in the future of the free enterprise system. One of the major annual undertakings is a membership poll. Each year a particular topic is the central concern. The poll involves projecting into the future extending to the year 2000 and beyond. Projections for a particular time frame are given accordingly. The 1979 topic for the Forethought Poll was "Consumer Markets and Industries." The following is the most recent information available from this group.

The polling method used is a Delphi approach in which participants are requested to identify trends and issues related to the topic in the first round, and the second round requests more specific forecasts. Forethought emphasizes that the results are not predictions as much as they are collective expectations for long-term prospects. During the 1979 Poll, 276 participated from industry with 310 from the Academy of Management. This latter number includes senior corporate managers from industry as well as members of the Academy of Management.
The Poll consisted of 100 multiple-choice questions for which respondents were requested to estimate for three periods: 1980 - 1985, 1986 - 2000, and beyond 2000.

The University of Georgia, College of Business Administration, under the leadership of Dr. A. G. Kefalas, was responsible for tabulating and analyzing the results of this 1979 Forethought Poll. The complete analysis of the results are not yet available. The following summaries, however, are the statistical results of specific issues related to concerns of the present study.

**Climate.** From 1980 - 1985, continuity is the firm consensus of the 100 items considered, for half, at least 70% of respondents selected choices indicating matters will remain as in 1979. Some specific trends that would lend variance included the expectations that the United States standards of living will be about the same from 1980 - 2000 (84.4% Industry and 65.1% Academy of Management).

The United States economic productivity is also seen to remain about the same until 2000 (79.9% Industry and 65% Academy). It should be noted that a fair size (32.5% Industry and 34% Academy) felt that from 1986 - 2000 productivity would increase significantly.

In response to the likelihood that United States government would take effective action to break up, or more closely regulate largest United States Corporations from 1980 - 1985 (46.1% from Industry felt that to be unlikely with 53.4% from the Academy) From 1985 - 2000 a greater majority from both Industry and the Academy felt that that probability would be greater (53.9% and 49.5).

Supporting that vein of thought, 52.5% and 67% felt that significant
deregulation of Business and Industry would be very unlikely. Forty-three-point-five percent from Industry and forty-point-eight percent from the Academy felt that deregulation might be a likely turn of events during the 1985 - 2000 time frame.

**Technology** The results indicated that we will experience sustained technological innovation with a 70% (1980-1985) and 81.8% (1985-2000) from Industry and a 49.5% (1980-1985) and 70.9% (1985-2000) from the Academy. The overall rate of United States technological innovation will be about the same, 70.8% (1980-1985) and 50% (1985-2000) Industry, 68.9% (1980-1985) and 43.7% (1985-2000) Academy. Forty-point-three percent Industry and forty-four-point-seven percent Academy feel the rate will be significantly higher between 1985 and 2000.

**Structure.** Sixty-three-point-six percent Industry and sixty-four-point-one percent Academy felt that the mix of consumer products vs services will remain the same from 1980 - 1985. However, both felt that there would be a shift significantly toward services from 1985 (72.1% and 66%).

The likelihood of a shorter work day, week, and career spans, (this forecast was assumed from another issue), was generally heavily supported with both majorities responding between "somewhat" and "very likely."

**Nature of People/Values** Most forecasts that would fall in this category would be indirect expectations, e.g., the likelihood of an increased demand for Leisure-Related products or services indicates a leisure ethic.
The consensus is that the United States will experience an aging population (at least 5% higher) after 1985.

Yankelovich, Skelly and White

Yankelovich, Skelly and White, Incorporated, is a private research service which offers six types of "customized" research to corporations, associations and government, consumer and industrial markets, financial services, public opinion, media, and Human Resources. The firm's research services include, Laboratory Test Market, which estimates market share for new products by means of simulation, Monitor, which is a multi-sponsored business service tracking the impact of social change on marketing of consumer goods and services, Corporate Priorities, which is a multi-sponsored business service which anticipates public policies and suggest options for Corporate response, Travel Pulse, a multi-sponsored tracking research for travel marketers, and Signal, which is a multi-sponsored research service which provides date and forecasts in the role that work and career play in American life. Signal provides an overview on how work values are changing and among which kinds of workers, tracks the potential effectiveness of new types of incentives and rewards, and explains and predicts human resource development trends.

Signal's research methods include annual survey via in-home personal interviews, projectable national sample of population, over sampling of key occupational categories, and special college population sampling.

Signal reports its finding by way of formal slide presentations and informal work sessions, seminars and meetings.

No special reports are available to those who are not actively sponsoring Signal or any of the other research services provided by Yankelovich, Skelly and White, Incorporated.
Clients include AT&T, Alcoa, Bendix, Chase Manhattan, Dow Chemical, General Mills, Hallmark Cards, IBM, Marriott, Pillsbury, Shell Oil, 3-M, and Western Union among many others.

General forecasts based on the polling efforts of this firm were obtained from several articles written by Daniel Yankelovich or Florence Skelly. These forecasts deal basically with the Nature of People area.

They can be summed up as follows:

- Shift to Focus-on-Self,
  Rising Psychology of Entitlement
  Changes in Ratio of Available Leisure Time to Work Time,
- A concern about "Meaningful" Work,
  An apparent indifference to traditional penalties for poor performance,
  An impatience with waiting for advancement or promotion,
  A wide array of lifestyles and, hence, of compensation and work condition needs

Yankelovich coined the phrase, "New Breed Workers." He predicts that, from the survey evidence, above all else, people will stress recognition as an individual in the working environment and second, an opportunity to be with pleasant people with whom they enjoy working.

John Naisbitt, a senior vice-president of Yankelovich, Skelly and White and publisher of The Trend Report, tracks social changes by collecting and content analyzing newspaper clippings. Since 1970, he has been coding and filing over a million-and-one-half local news items to determine the direction and degree of change broad social trends will take.

Structure. Naisbitt sees decentralization as a major trend for the eighties. In fact, he has found this to be the single most dominant trend. "The Great Depression, the World Wars, and the dynamics of a growing industrial economy made hierarchical, top-down structures appropriate and effective for those times. But now the society is creating
decentralized alternatives to almost every centralized form of an organization. We are restructuring our hierarchies to accommodate a horizontal organization of many small, innovative entrepreneurial groups.\(^{15}\)

**Technology**

We will shift from an industrial base to an information base economy. This will be more profound than was the shift from agriculture to industry. Before the strategic resource was capital, soon it will be knowledge.

The "computer as liberator" will have a powerful influence facilitating the less hierarchical arrangements with convenient and widespread access to necessary information.

**SRI International**

SRI International (Formally Stanford Research Institute) is in the process of conducting a one million dollar, three year study for 70 Corporate clients. The Values and Lifestyles (VALS) study is suggesting that by 1990, at least one-fourth of the population will be strongly individualistic in consumer buying patterns rather than conformist. This trend is in contrast to 15% - 17% now considered individualistic. This study has identified two divergent groups of people likely to experience some conflict during the 1980's: "achievers" who prize tradition and materialism, and "inner-directed" types who espouse self-expression and and planetary/social responsibility.

Implications for business in these transforming values and lifestyles might include

- A more segmented market place,
- A growing emphasis on universal values by business,
- A greater demand for the authentic and natural\(^ {16}\)

While these implications relate specifically to advertising, they can be utilized for any public relations considerations.
NOTES


2 Ibid

3 Ibid, p. 58


9 Linstone and Turoff, p. 5

10 Rosemary J. Erickson, Some Issues in America in the 1980's, Western Behavioral Sciences Institute (December 12, 1978) Lavalla, California


12 Ibid

13 Trend Analysis Program (TAP), American Council of Life Insurance


16 Arnold Mitchell, VALS Program, SRI International, Menlo Park, California
CHAPTER FOUR
INTERPRETATION OF RESULTS

The purpose of this chapter is to report the direction and degree of change forecast for numerous issues associated with changing values in America. Values and their consequent motives to work are seen as undergoing significant changes within the population as a whole and will probably manifest in numerous ways. Various value related changes were abstracted from fourteen primary respondents. These forecasts were organized in Chapter III according to four basic levels of change: Organizational and National Climate, Technology, Organizational Structure, and Nature of People or Values. This chapter will report the common issues emerging from the content analysis of the fourteen studies submitted. After presenting the most common issues listed under each level of change, the issues respondents tended to agree upon and the issues which resulted in disagreement will be determined.

This chapter is organized in two parts. First, the common issues which emerged from the fifteen sources will be presented. The second, more detailed section of this chapter will involve the presentation of the results of each of the four levels of change including an analysis of the convergence of the direction and degree of change suggested for each issue.

The issues most commonly cited (i.e., 50% or more of the respondents made comment) that were categorized under National and Organizational Climate included the following:

Trend toward a Service Economy,
Need for Individual Efficiency and High Productivity,
Government Regulations,
Emphasis on Organizational Democracy

81
Issues most commonly cited and considered to be "Hard" or "Soft"

Technological considerations included

Organizational Democracy,
Decision-Making,
Emphasis on Information Processing/Computer Planning

Those issues classified under the Structure Category which were frequently mentioned were

Trend toward a Service Economy;
· Average Worker's Hours per week,
Flex-time,
· Decentralization.

Issues commonly cited and categorized under Nature of People/Values included

· Women and Other Minorities in the Labor Force,
Average Age,
Self-Development,
Desire for Personal Growth,
· Leisure Ethic,
Commitment to the Organization,
· Economic Motive to Work,
· Social Motive to Work,
Interesting Activity,
· Individualistic.

Tables 1, 2, 3, and 4 represent the direction and degree of change forecast for the given issues. For example, under Climate, six of the fifteen studies made forecasts in the area of Economic Abundance. One felt that Economic Abundance would increase greatly, two felt that it would increase slightly and three felt it would decrease slightly. Subjective judgments made as to which degree a particular forecast would be placed were checked with non-partial individuals. In cases of disagreement, additional opinions would have been solicited to determine greater agreement. It was unnecessary to solicit additional opinions.

There was total agreement by the eight respondents who mentioned a Service Economy trend would increase greatly by 1990. Seven of ten felt
Table IV-1

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Table IV-3

**STRUCTURE**

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that Government Regulations would increase greatly with one forecasting only a slight increase. Two forecasted a slight decrease in Government Regulations. Six of seven respondents felt that the emphasis on Organizational Democracy will increase greatly with one suggesting the increase while one felt this characteristic would decrease greatly. Only three commented on the Quality of Work Life, yet, all three agreed in forecasting greater increase.

In addition to agreement concerning Organizational Democracy mentioned under Climate, eight of eight considered the "Soft" Technology of Decision-Making to be greatly increased by 1990. Seven of seven felt that the Technology of Information Processing/Computer Planning would increase greatly. Although only four responded to Planning Technologies, all agreed upon great increase. Only three responded to the Emphasis on Efficiency, yet, all three agreed upon a slight increase.

Issues that received the greatest degree of convergence in the Structure category included Service Economy (trend toward increasing greatly by 1990), Flex-time (nine of ten forecasted a great increase in the application with one feeling this emphasis would remain as it now is), Average Worker's Hours per week (seven of seven agreed that this will probably decrease slightly), Emphasis on a more flexible management hierarchy (six of six agreed that this would increase greatly), Emphasis on Innovation, Creativity (six of six projected to increase greatly), and Decentralization (six of eight agreed this need would increase greatly, though, two felt a decrease slightly and greatly).

Some agreement was made concerning the need for more Independent Thinking with four of five expecting greater increase, yet, one study sees this as decreasing slightly toward the end of the decade.
Although less than 50% of the studies mentioned Self-Motivation as an issue to watch, five of the five had complete agreement in seeing this characteristic as increasing greatly. The emphasis on Teamwork received the same amount and degree of consideration.

The Average Size of Business received a small amount of attention, (was only mentioned in three of the fifteen studies), and there was no agreement as to direction or degree of change (two felt size would increase greatly and one felt size would decrease greatly.) Similarly, Emphasis of Individual Creativity was mentioned in only two studies and while they both forecasted increase they did not seem to agree on the degree of change.

The direction of and issues receiving the greatest degree of convergence under the Nature of People/Values category included a greater increase in Women and Other Minorities in the labor force, a slight increase in the Average Age, a greater increase in the Emphasis on Self-Development, a greater Desire for Personal Growth, a greater increase in the Leisure Ethic (nine of ten commenting agreed on the degree of change), a greater increase in the Need or Motive of experiencing one's work as an Interesting Activity, and, a greater increase in a trend toward Individualism.

Areas that received a fair amount of response, yet, clearly did not agree included Commitment to the Organization, Company Loyalty, and Economic, Social, and Mastery-Achievement Motives to Work. The Motives to Work areas tended toward an increase of emphasis, however
CHAPTER FIVE
IMPLICATIONS FOR MANAGEMENT TRAINING

Organizations have evolved and changed from decade to decade, and so, too, has the philosophy and methodologies contained within the broad parameters of the training and development field. In the 1930's training was heavily influenced by the Scientific Management School of Thought. Managers of this era were considered to be an elite class of people who needed merely to be trained to organize and structure the work force. The training methodologies of the 1940's were influenced by World War II in that efforts were streamlined due to the enormous need for training. On-the-Job training was the primary method utilized with the emphasis placed on skill building instead of theory.

The 1950's saw the first attention placed upon teaching and understanding human behavior as a large part of training in organizations. The "human relations era" focused on the managers impact on people and utilized the case method and role playing as the means to teach. During the 1960's, much attention was given to the improvement of various training methods. Sensitivity Training and heavier emphasis on group dynamics were offered. Leadership became synonymous with Management.

Personal Growth was the major direction of training during the 1970's. Individual's needs took precedence over those of the organizations. The 1970's introduced negotiating skills, career planning and special courses for women and other minorities.

Speculation as to the nature training can be expected to take during this decade has been diverse. Rather than considering the forecasted approaches and methodologies alone, the purpose of this study has been to first consider the nature of changes that can be
expected for the climate, technological, structural and nature of people/values levels of the organizations of the 1980's. During this decade the direction and degree of change will be profoundly influenced by changing values. This influence will be experienced on each of the four levels recognized above.

The purpose of this chapter will be to analyze the forecasts of management personnel and social scientists presented in Chapter Four in order to recommend training alternatives to meet the changing needs. The following section of this chapter will consider the results and training alternatives by the four levels: climate, technology, structure and nature of people/values. The third section of this chapter will consider the need for contingency management training plans and other types of training forecasts not included in the results of this study. A fourth section will also summarize the changing role of the manager. A final section of Chapter Five will conclude this study by recognizing the limitations of this study and making recommendations for future research.

**Training Alternatives**

**Climate** There were three climatic issues about which there was considerable agreement: trend toward a Service Economy, government regulations and emphasis on organizational democracy, all of which are seen to be increasing greatly toward 1990.

A trend toward a Service Economy means, simply, that most of our labor is used to provide services such as retail, banking, insurance, education and communication rather than goods such as farming, manufacturing and construction. This change is occurring to a large degree
because of the success in providing for material needs. Significantly, there is no known nation in history which has ever become a service economy. The United States will be the first. Therefore, there are no specific guidelines for operating under such conditions. Some of the implications for moving toward a service economy might include: a decline in the rate of productivity due to being labor intensive and difficulty in mechanizing; the need for more managers and supervisors since service work tends to have a smaller span of management than does industry; the need for more white-collar or technically and professionally prepared, and more decentralized operations.

Although difficult to make specific training recommendations based on climatic trends it is clear that skills required of the service worker might include the ability to use data and a heavy reliance on information relating to people and coming up with new knowledge or access to modes of analysis.¹

Most forecast that, as an outgrowth of the bend toward becoming a more socially concerned society, governmental intervention will be on the increase toward 1990 giving rise to a number of conflicts.

Theoretically, a humanistic society is supposed to be much concerned with individual needs and freedoms, but in their haste to achieve its objectives, its proponents have openly welcomed governmental intervention. As a result, freedoms also have been lost. For example, small businesses such as foundries or mines have been forced out of business by governmental intervention in the name of ecology...owners lost investments and people lost jobs. Consumers find the cost of their automobiles increased by environmental and safety devices...In each instance the government has intervened to accomplish social purposes, but in the process some persons have lost long-cherished freedom.

In some cases economic efficiency is being replaced by a policy of social justice imposed before properly analyzed and popularly
supported. In terms of training, there can be some conflict in how to spend the budgeted dollars when a larger percentage of programs and guidelines imposed on organizations may require training, yet there will be a strong need for training to meet the growing demands of a service economy.

A second major conflict emerges because of the forecast that organizational democracy will increase greatly. Yet, with greater governmental regulations, the areas in which democratic decision-making can be applied may be limited considerably. 3

Due to the rapid increase and amount of change, scientific and technological, the federal government can be vital in serving a larger role which includes that of master planner or systems manager. This will, inevitably raise questions, though, of the implications for individual freedoms — a highly valued lifestyle — and the free enterprise system.

Technology. Most forecasts which could be classified in this category pertained to "soft" or process technologies rather than "hard" or machine related technology. This ratio, in itself, emphasizes the importance of the need to concentrate on the "soft" technologies of decision making, planning and information processing during this decade.

This "Quality Circle" concept utilized by such companies as General Motors, Ford, Westinghouse, and Honeywell, is a promising means by which to make decisions, and improve quality and efficiency. The "Quality Circle" was described in Newsweek magazine as typically made up of eight to twelve supervisors, managers and volunteer workers who received several hours of skills training in gathering and using data.
The group meets once a week on company time to discuss problems and generate solutions. At Honeywell, these groups are called "Production Team Programs, Involvement Teams and Productivity Improvement Teams." The companies who have used such an approach report successful results in a number of areas. This has become a worthwhile means by which to gain greater and more creative input into the decision-making process and is a useful way of incorporating greater participation. Honeywell managers stress that these teams are not short-term or a quick-fix. Teams are a long-term commitment to a change in management style.

Participative decision-making and organizational democracy were trends which were popularly espoused as receiving greater emphasis toward 1990. Some of the drawbacks and areas in which attention should be focused for training efforts include:

- The predominant belief that the cost outweighs the benefits in worker participation;
- Most top managers genuinely lack the experience and know-how in dealing with participative management;
- It is felt as a threat to power and traditional lines of authority;
- Unions are suspicious of the concept;
- It threatens the conventional hierarchy and organizational structure.

Management training designed to examine and dissolve such prejudices and perceptions will be vital if the concept of participative management is to survive and develop. Techniques to deal with such issues could include the consciousness raising or encounter group approach, lecture, role-playing or the assessment center method by which specific characteristics and attitudes, which a manager would need to facilitate participative management from a total organization to an interpersonal perspective, are isolated. Once determined, the
manager can be assessed as to where he or she is and can begin from that point — with the help of a qualified counselor/trainer to formulate a plan to change attitudes and behavior toward those which are more productive.

Information processing received a great deal of attention from those forecasting "soft" technological changes. This attention is probably due, in part, to the tremendous increase in the amount of information available and useful to organizations today. A second important reason for the emphasis on improved processes of information utilization, is the increase in those who need and those who expect to have access to pertinent information.

Technical developments such as low-cost, large-scale storage techniques, improved communication techniques utilizing satellites and improved communication between people and computers will require substantial increase in training for everyone in the organization. Increasingly, industry will begin to provide in-house training for employees to actually change careers, such as retraining a clerk to be a computer programmer.

Although managers are increasingly obtaining information more easily, there is, again, a difficulty in knowing how to use this information. Developing procedures and forms to set goals, to plan and develop organizations are social or "soft" technologies. These technologies are lagging behind the development of "hard" technologies. This lack could have more of an impact on organizations of the future than any other single factor.

Structure. Forecasts relating to organizational structure were
arranged into two groups those pertaining to time structure and those pertaining to hierarchy and/or manpower structure. Time flexibility and work re-scheduling promise to be one of the more popularly utilized innovations of the 1980's. The concepts regarding time flexibility have arisen from the growing percentage of non-traditional workers, e.g., women with young children and older adults embarking on second careers and not willing to work full-time. A second major cause for time flexibility grows from the increased emphasis the younger work force has placed on leisure activities.

An example of alternative work schedules include part-time work. Part-time workers make up nearly 20% of the working labor force. Many union officials are pushing for shorter work-weeks and private sector employees are accepting shorter work-weeks rather than being laid off. The average work-week was unanimously forecasted as decreasing slightly by 1990. There are those who propose that more dramatic alterations could include a "flexi-year," whereby some may opt to take a year sabbatical or leave of absence.5

An initial problem that was recognized in implementing structural change is that of appropriate and timely communication. All the employees should be made aware of any new schedule and have an understanding of the entire reason for any such change. Most scheduling changes could have a dramatic effect on an organization's production goals. For that reason management training should include techniques for creative and efficient planning means by which to successfully make the transition.

As a result of the growth toward being a service economy, the
changing structure of organizations will necessitate more managers and supervisors. Service work requires a more narrow span of management. Service industries are more decentralized, bringing the service to the need. Along with the greater need for knowledge, technological advances in communication and information processing facilitate successful decentralized operations.

Aside from the need to decentralize for the needs of the service economy, corporations seem to gradually be moving away from the authoritarian controls which have been centralized in the supervising hierarchies. Individual self-discipline, self-motivation and team-work could become the primary management tools of the future. Knowledge of computer technology and information processing will be essential to the maintenance of such independent operations.

More and more attention has been focused on the desirability of altering the structure of particular jobs. Greater flexibility is being exercised to design jobs within time, technology, social and personal need parameters. See Table V-1 for a listing of a number of job structuring alternatives.

Nature of People/Values. Those who responded, generally agreed that the percentage of women and other minorities entering the work force would increase greatly by 1990. The other demographic forecasts saw the average age of workers to increase slightly by 1990. The overall nature of this older, diverse, work force is individualistic (8 of the 8 who responded saw this to increase greatly by 1990).

Training, or preparation for work, for a group such as the one described above, would be a vital tool for productive operations
ALTERNATIVE PERSPECTIVES ON JOB DEVELOPMENT

JOB DESIGN - The specification of job content, method, and relationships in order to satisfy technological and organizational requirements, as well as the social and personal requirements of the jobholder.

JOB ROTATION - The jobholder moves from one task to another within his home work unit.

JOB ENLARGEMENT - Several related tasks are assumed by an employee who previously handled a single task of a fractionalized part of an operation, sometimes called horizontal job loading. More emphasis on changing job content than on expanding discretion.

JOB ENRICHMENT - The difficulty of a single task is increased to demand more of the employee's capabilities including the acceptance of some responsibility for managing the job, sometimes called vertical job loading. Attempts to add to job variety, job autonomy and to increase skill requirements. Emphasis on both job content and job discretion.

WORK SIMPLIFICATION - (or job reduction) The oldest form of job redesign in industrial society. Originally employed in manufacturing but now used in some governmental service occupations to reduce professional type jobs to the level where they can be handled by paraprofessionals such as teachers aides and paramedics.

FUNCTIONAL JOB ANALYSIS - A systems approach to changing work which provides for the analysis of the worker, the work organization, and the work task. It stresses the outcome needs of the organization and the behavior needs of the worker. It is most often used to redesign jobs to meet the capabilities of the available labor force.

Taken from Gary Gappert's Post-Affluent America, 1979.
This necessary training would be in the areas of technical or skills development and in the area of exploring attitudes held toward work as a philosophy. Included here can be career counseling for those organizations who place a great deal of emphasis on a thorough training program.

Career Counseling expanded to focus on the needs, talent, and abilities of the individual, overall, rather than purely that individual's career path in the particular organization would begin to address a continual shift toward a greater need for and emphasis on self-development and personal growth. With a striking concentration on individualism and a preponderance of variety in the type of worker, organizations can expect to employ, management would do well to relate to these people in a way that would maximize each person's ability to contribute. Thus, for management, training in interpersonal communication should be a priority for the decade of the eighties.

The ability to relate to and emphasize with people can be a learned process. Because these abilities are so closely related to management employee relations and productivity, it could be costly for organizations to exclude such development from its management training schedule.

Training in the area of interpersonal communication, or more specifically, emphasizing might include modules in the examination of languages and labels, for example. Particularly as individual differences become more apparent in the workplace, language must change as well. Because of the built-in structure of language, discrimination can unintentionally result. Simply to be aware of unforeseen consequences is sufficient justification for management training.
Management tools such as personality profiles are being greatly refined. An instrument such as this, meeting all Federal requirements for EEO, utilized to identify aptitudes and personality dimensions can be used by management to create more specific job criterion. As a selection tool, it could be used to reduce turnover and increase productivity once the successful dimensions are established in a given job. With the proper training, managers could use the profile to insure a more appropriate match for the employee and a job he/she would consider most meaningful.

The shift toward a greater leisure ethic supports the structural considerations of a flextime working schedule. This, too, supports individualism. Now recognized as a legitimate form of productivity and something that a respectable member of society can engage in even before retirement, leisure has yet to be an activity that most people plan for and adjust to. As a result, self-esteem during extended periods of leisure has been seen to decline. This is a conditioned result. Self-esteem is directly related to what is learned to be good or bad. Organizations might begin to address this issue by better preparing retirees—or those taking an extended break from work—to plan for such periods. This preparation could be an extension of career counseling. Managers of this decade and beyond are, of necessity, in need of developing skills associated with personal counseling. Counseling, as can be seen, will take on many forms in the future.

Only 20% of today's workers are involved in front-line production. Therefore, to increase the productivity of the majority, or 80% of the workforce who are professionals, managers, technicians,
continue to expect thorough training and information. In fact, for a series of kickoff meetings for the 1980's, Allstate Insurance Company designed a training program for the supervisory and management personnel devoted entirely to changing societal values and the repercussion for managing and for the insurance industry.

A result of concentration on values and their diversity from person to person might be focusing attention to the creation of better leisure time activities along with both avocational and vocational counseling and education. Evaluating the "whole person" as opposed to merely the person as he/she fits into the working environment might be a concept for management to seriously entertain. In an effort to take the pressure off the organization's responsibility to satisfy all of the individual's needs through work, conceivable personal growth issues could cover a wide spectrum. Some of these issues may have been in practice for some time, yet not within an organization nor widely practiced by large members of management personnel.

Extension of the mental faculties has taken on a number of meanings. Analytical abilities, the ability to envision, to think imaginatively, as well as to broaden perceptions such as is necessary for speed reading, and important ability needed to keep abreast of one's field, has increased in importance for the average manager.

Training can be directed toward doing the things for the intellect that group work has been doing for the emotions — as freeing of the intellect through greater, broader educational opportunities, decision-making, logical thinking, and creative thinking training. According to Dudley Lynch, editor of FOCUS/Creativity '80, a Texas based newsletter on innovation, money management theories and training techniques now in use
must be updated or abandoned as a result of being too narrowly focused on just a few aspects of the brain's functioning. Lynch foresees more and more organizations will orient their executives and managers to the "hidden agenda" that the brains of their employees bring to the job — agenda's as inherent as their DNA. New techniques of focusing on the brain-determined values systems will supercede current opinion-polling. Lynch, along with others, offers that the left-cerebral centered thinking characterized by linear, temporal and memory assimilating activities will be less emphasized as the world and decision making increases in complexity. The analytic mode of thought will be thought less valuable than a more synthesizing mode emphasizing patterns, rhythms and space. Virtually all of our management and training theories and techniques have been designed to deal with only one of these brain systems, (the Analytic)... in a slower, less complicated world, we were able to get away with it. But that is no longer, for more and more organizations, an affordable luxury. Visualization and mind control techniques might offer organizations viable alternatives to stress management as more and more is being discovered about the human brain and psychological nature. Stress management will continue to be a popular area for management training, particularly as technology and growth complicates the environment. Many companies have begun to increase their attention to managing stress through physical assessment.

As "hard" technology becomes more complex, social and behavioral technologies including interpersonal therapeutic techniques will be heavily utilized. Interpersonal communications aimed at enabling two or more persons to pick off and amplify one another's electro-chemical brain currents in order to conduct "parallel transmissions" for more complex than
programs which were cited as having the greatest success was training, in terms of popularity, followed closely by job redesign. Both were cited as successful means by which to increase worker motivation.

**Contingency Training Options**

The studies analyzed in this project did not specifically discuss a wide range of training topics and methods which can be utilized. In fact, those mentioned in the first part of this chapter were offered as possible techniques in answer to the changing or predominant needs commonly cited. To further develop the possibilities for training in the eighties this section will consider other content and process methods which have been considered in the training literature as viable alternatives now and in the future. First, some other training topics or content alternatives will be considered. A second section will cover process techniques for adult training. A final section in this part of Chapter Five will summarize the changing role of managers, particularly in the terms of the managers use of training as a tool for motivation.

On the climate level, major changes "in the governance and technical conception of organization" that would require a significant degree of training consideration would be worker self-management. This specific concept is an offshoot of larger reformations such as participative management. Changes in the "internal governance of the organization with respect to decisions on production activities and resource allocation," such as job enrichment and forms of participative management are more narrow foci for training.

On the Nature of People level, a variety of compulsory behavioral analysis will continue to gain popularity as important content material. Since behavior stems from attitudes and values and, since people will
the job on the theory that this is a more efficient production system and that, in any event, economic gain is the worker's only reason for working. This theory is wrong on both counts;

- The worker should be assured the widest possible latitude of self-management, responsibility, and opportunity for use of "brainpower." Gimmickry and manipulation of the worker must not be employed,

- The changes in job content and the added responsibility and involvement in decision making should be accompanied by an effective reward system;

- Workers should be able to foresee opportunities for growth in their work, and for promotion;

- The role of workers in the business should enable them to relate to the products being produced or the services being rendered, and to their meaning in society, in a broader sense, it should also enable them to relate constructively to their role in society.

Managers should be trained in the philosophic underpinnings of such a system. Extensive examination of their own, conditioned, attitudes toward the "shoulds" and "ought to's" of management would follow. This training can only help to insure a successful attempt to implement participative management. That this approach cannot be maintained without commitment by management, has been demonstrated again and again. Training for such a widespread, innovative operation should be conducted over time. Changing a philosophy, such as who to manage people cannot happen during a single training session. In this case we are dealing with changing habits--habits of an individual if he or she has been managing for a long period of time, or habits of a society that is only recently beginning to try a new approach to achievement within organizations.

From a four year study reviewing United States experimentation with productivity reported in A Guide to Worker Productivity Experiments in the United States, 1971-1975, by Katzell, Bienstack and Faerstein, the 85 experiments reported the favorable aspects of productivity. The
not create themselves but, rather, come about for a specific purpose, the interplay of individual goals can be brought in as a consideration in designing meaningful positions.

Considerable confusion arose as to what motives might predominate in the workforce of 1990. What are the motives to work popularly espoused at this time? This confusion is probably due, in part, to the diverse motives and needs and types of individuals who compose and will continue to make up the work force. Also, it is a fact that little is known about human motivation. Regardless, experiments in improving work are constantly being tested worldwide. These experiments generally stress the fulfillment of human development as much as the achievement of productive efficiency. This is showing a sign of the changing values we are experiencing. Never before has productivity and human development been given equal attention. Worker participation in decision making has been a relatively recent means by which human development and productivity can be meshed together.

Criteria that has already been recognized as basic to a successful participative decision-making system include:

- The programs should be voluntary. Workers must have the free opportunity to decide whether or not to participate in the program. To order compulsion is to invite resistance and failure,
- Workers should be assured that their participation in decision making will not erode their job security or that of their fellow workers, that they will not be subject to "speed up" by reason of it, and that the program will not violate their rights under the collective bargaining agreement,
- Workers should genuinely experience that they are not simply adjuncts to the tool, but that their bent toward being creative, innovative, and inventive plays a significant role in the production (or service process,
- Job functions should be engineered to fit the worker, the current system is designed to make the worker fit
clerks, and sales people, attitudes and behavior are more important factors. Compensation that has here-to-fore been utilized to motivate and ultimately effect productivity has become an expectation. Benefits are now entitlements. Motivation, then, will become a topic to re-evaluate during this decade. Not only will managers be dealing with a work force that is diverse, but one which does not primarily produce goods, but rather, services and one whose expectations far exceed any previous work force in terms of what the organization should provide for them as rights and entitlements. How to motivate the employee will receive far more attention in training than previously.9

While this study demonstrates no conclusive evidence of a specific shift in the popularity of one motive to work over another, there were significant trends worth mentioning. The emphasis on work as an interesting, meaningful activity is seen by many to be generally of greater importance to the worker than other work motives. Finding meaning in one's work, too, can stimulate the acceptance of the organization's goals. Because a manager has control over information flow and is the most visible representative of a company, he is clearly the primary agent in developing a job into a meaningful and interesting position for a given individual. His job can be achieved if he has knowledge of why people work, what needs are fulfilled, what expectations exist and what individual goals are. Training in the area of assessing and individuals needs and values could be beneficial in gaining this kind of information. Counseling skills, again, would be important.

Specific techniques such as Job Development can be useful tools for which managers can receive training. Since job characteristics do
single-channel voice transmissions, which would of course, realize new levels of intellectual achievement and social interaction. This was a forecast made by the National Industrial Conference Board and is not expected to be realized until after 1990. Many organizations do not provide a basic interpersonal communication course which emphasizes certain key principles as a core module in management training. The extent of the training necessary for this new approach to communication would far exceed anything presently offered.

The following are common training media utilized for most organizations:

- Lectures - Speaker addresses an audience;
- Directed Group Discussions - A leader through questions and observations guides a group as it discusses a topic;
- On-the-Job-Training - A person becomes acquainted with a procedure by taking part in normal workflow;
- Role Plays - Participants choose or are assigned roles that they ad-lib within the frame of a set of instructions;
- Case Studies - Participants are confronted with the details of a realistic problem that they must resolve;
- In-Basket Exercises - Participant, playing an assigned role, responds to a series of letters, memos, forms, or other documents calling for action;
- Demonstrations - Participants observe a leader as he or she performs a task;
- Leaderless Group Discussions - Without a leader's direction, a group reaches a consensus on an assigned topic;
- Panels - A number of speakers discuss the various aspects of a subject before a group who listens and questions;
- Workshops - Under the direction of a leader, participants with a high degree of individual participation, explore and attempt to resolve a common problem;
- Games - Participants, as groups or individuals, attempt to achieve an assigned goal by working within assumed roles, monitored by a set of rules, restricted by time limitations, and evaluated by a scoring system.
Data collected from a nationwide sample of Fortune 500 companies indicate that, of the insignificant management skills that can be taught, on-the-job training (OJT) or job rotation are most effective. Paul J. Gufielmine, director and assistant professor for the Center for Management and Professional Development at Florida, Atlantic University, discovered that making decisions under uncertain conditions, identifying opportunities and innovating for the good of the organization and thinking as an entrepreneur, all important conceptual skills, are best developed by OJT. The case study methods, however, is the teaching technique preferred.

Through greater use of television, cassettes, satellite conferencing, and computer data banks, training can be greatly decentralized.

For any training incident, objectives should be established by which the success of the training could be determined. A training objective should describe the behavior or performance of the trainee after he/she has been exposed to a learning experience.

In order to determine the content and process of a training experience, a systematic needs analysis should be undertaken. A thorough needs analysis should include:

- A definition of the performance problem/need;
- Determination of the cause of the problem/need, e.g., deficiency of knowledge or management;
- Selection of solutions to the problem or a means by which to satisfy the need.

The pressure for productivity will reduce any margin for ineffective training programs. Considerations aside from those of content and process should be made. The climate of the organization and the philosophies of management are the foundations upon which training is developed and will succeed or not. The philosophy a manager holds will determine the parameters to which training endorsed by an organization can extend. If the
management philosophy is highly structured and regimented, the probability that training will follow a similar format is high. If the management philosophy is flexible and open, there is a high probability that training will follow suite.

Organizational development is an increasingly popular philosophical approach to training that reflects the flexible, open management style. Organizational development is a process of planned change dealing with people in an organization and the organization as a whole. It focuses on changing the organization by examining the people who make up the organization, how they work together as a unified whole. The most frequently used strategies include:

1. Team Building
2. Intergroup Meetings
3. Goal Setting and Planning
4. Conflict Resolution
5. Skill Building
6. Laboratory Training

Training can be directed toward accomplishing one of these strategies or is conducted as a part of the larger strategy.

The Changing Role of the Manager

During this era of rapid change — socially and technologically — a manager must have a broad range of knowledge and finely tuned human relations skills. At the foundation of the knowledge and the human relations skills is a viable management philosophy. A manager's philosophy is the determining factor in the direction that knowledge and skills will take.

...The manager's philosophy becomes the heart of the management process as his ideas, feelings and beliefs about the organization, people in it, its purposes and values are expressed in actions. If he believes that people cannot be trusted, controls are instituted. More reports are required... If a manager is obsessed with every detail, more accounting, briefing, and reviews are needed. In every letter or other paper
flow, a manager’s philosophy is revealed. By examining his in-basket, you can quickly determine guides for action—his managerial philosophy. Managers need to be engaged in the process of re-thinking their roles in an enterprise...to reflect upon their philosophy in view of the complexities of the business world. A tremendous means by which to re-examine their role is through a comprehensive management development program. Understanding theory and sharing experiences are important parts of such a program. Even more important, though, is for managers to learn and understand, to use the forces of renewal in all social enterprise.

A new function for management and organizations must be considered. Formerly, the principal function has been based on the technical and economic aspects of business. The humanization of work, although discussed, has not been incorporated in management thinking.

Until recently management emphasized the tension between technical-economic and behavior concepts rather than their inter-relations, their separation and antithesis rather than their synthesis. The same applies to the middlesomeness of the environment; management appraises it more as a constraint than as a valuable contribution to a new and better well-being-oriented policy.

For effective management, a philosophy should include organizational climate considerations that sees its people as a necessary part of goal formulation and execution, a climate which motivates people to participate. A second element of effective management is the ability to synthesize or integrate various views into a set of goals acceptable to all.

Traditional management styles will have to change. In several studies designed to isolate traits of a successful manager and management style, a trusting attitude, concern for the personal fulfillment of
employees, innovation, intuitioning, willingness to listen, risk-taking and "process" oriented were distinguishing qualities. 22

Many forecast that the future role of the manager will be that of conflict managers due to the diversity in the work force, the diversity of problems confronting management and the complexity in the environment – a function for which the average manager has not been trained or selected for. Along with managing conflict, he or she will need to exhibit entrepreneurial leadership. In this role the manager is focused more toward seeing to the long-term well being of the organization rather than simply maintaining the present state of the company. Coupled with this strategic approach to management, tomorrows leaders must be aware of the social responsibility of both himself and his business, and an awareness of the changing values and to new cultural milieu.

In a socially innovative society an important managerial consideration would be to expand to work opportunities. The larger goal would be to expand life options for individuals thus producing more synergistic lifestyles. The concept of a synergistic lifestyle involves the development of and balance between the areas of rewarding work, satisfying leisure and productive intimacy. 23 This concept moves away from the idea of conflict between work and non-work activities toward complementary forms of self-fulfillment and self-expression in all life activities. 24 Again, managers must be particularly skilled at counseling and dealing with conflict in this area.

In the 1980's, knowledge of how the changed American value system affects incentives and the motivation to work may well become a key requirement for entering the ranks of top management in both the private and public sectors. If this occurs, we shall see a New Breed of managers to correspond to the New Breed of employees. 25
Under systems which are developed where workers participate in the
development and management of their own jobs, supervisors and managers
would act as facilitators of the self-management process.

Managers' roles will change and will expand beyond anything that
has traditionally been within the realm of management. Providing for
alcohol and drug abuse treatment, providing day care centers and pro-
viding for opportunities for employees to maximize mental and physical
health are seen to be viable roles in future. Courses may be offered in
counseling, and learning to recognize mental health problems may be
required in management training programs.26

Management training has been observed to be less than effective.
Researchers contend that demonstrable changes are difficult to deter-
mine. Costs have been seen to outweigh the benefits. For the most part,
training has been operating from a weak foundation. The approach to
management training can be likened to the general approach to managing.
The managers are "taught" as if they are passive agents, just as employees
are managed as if passive agents.

The pattern for training in the future includes the necessity for
developing a philosophy which involves organizational support both in
terms of time and the incorporating new concepts "back home," and where
control is given to those involved in training. The content of manage-
ment training should be built around issues and concepts for which a need
has been demonstrated. Defining appropriate managerial behavior will be
an important step in demonstrating where a need exists. Content should
also be more geared toward skills building rather than theory. From
"The Myth of the Well Educated Manager," J. S. Livingston points out that:

Formal management education programs typically
emphasize the development of problem-solving and
decision-making skills, for instance, but give little attention to the development of skills required to find the problems that need to be solved ... Until managerial aspirants are taught to learn from their own first-hand experience, formal management education will remain second handed.27

Effective management training in the future will couple content whose need has been established, content that is practical and realistic, with utilizing a number of different approaches to learning including affective, kinetic and experiential in order to reach the greatest number of people. Behavior modification will be utilized as never before and a strong system of reinforcement through follow-up behavior monitoring will help insure the success of training goals.

Limitations

Three substantial limitations for this study are worthy of attention. There was often a sense of confusion as to the meaning of concepts such as "values" and "motives to work." I suspect that the shared meaning of these ideas were not always present. The difficulty was assigning measures to the forecasts as they were discussed from one study to the next.

The second limitation was the lack of availability of the results of studies conducted by private sector groups. Many groups conducting research would release results only to the organization for whom they were hired to consult.

The third serious restraint revolves around the methodological problems of self-fulfilling prophecy. If one holds an influential position in a particular field and makes a forecast which pertains to that field, the chances of influencing the outcome are greater. Human behavior can be influenced by statements about a probable future.

An increasing number of research groups both within organizations
and operating independently are conducting futuristic research. Their focus is a transforming society. More of this work should be made accessible to managers. These kind of data are precisely what should be provided to management personnel for their own development. Management must be made aware of the subtle changes occurring in the way people view the world. The exploitive manipulative Cartesian world view introduced by Francis Bacon no longer seems to be the one applicable approach to life. This view reduces complicated patterns to single causes. An ecological, holistic view seems to be the more appropriate. We can no longer exalt reason over intuition — a scientific over a religious mode of perception. Yang over Yin.
NOTES

1 Gary Gappert, Post-Affluent America The Social Economy of the Future. (New York New Viewpoints, 1979), pp 18 & 19


3 Rosemary Erickson, "Some Issues in America in the 1980's" (Western Behavioral Science Institute, Dec. 12, 1978), LaJolla, California.


5 American Council of Life Insurance, Trend Analysis Program, Report #8, Washington, D.C.


8 DuBois S. Morris, Jr., Ed. "Perspectives for the '70's & '80's" an Experimental Forecast Conducted by National Industrial Conference Board, Inc.& the Opinion Research Corporation, p 92

9 James O'Toole, Kenneth Brousseau & Ralston, "Employee Entitlements in the Eighties, Report F-38, (Los Angeles, California Center for Futures Research, Dec. 1, 1979)


11 Gappert, p 137.


13 Lynch, p. 6.

14 Lynch, p. 8.

15 Gappert, p. 12.

16 "Perspectives for the '70's & '80's," p. 69.
17 Paul Gufielmine, "Developing the Top-Level Executive for the 1980's and Beyond," *Training and Development Journal*, April, 1979, pp 12-14


19 Ibid, p. 267

20 Benton, p 24.

21 Ibid

22 "Right and Left—Brain Strategies of Managers and Planners" *Psychophysiology* 14 pp 385-392

23 Gappert, pp 13-15

24 Ibid, p 120.

25 Kerr and Rosow, p 21.

26 TAP, Spring, 1981

APPENDIX 1

GLOSSARY OF TERMS
GLOSSARY OF TERMS

Attitude: a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner.

Behavior: actions resulting from motivation ranging from a single act (voting) to a whole set of acts (pursuit of a certain occupation).

Belief: an inference made by an observer about underlying states of expectancy.

Ethics: the study of right and wrong, usually including the determining and encouraging of what is right.

Ideology: or organization of beliefs, and attitudes—religious, political, or philosophical in nature—that is more or less institutionalized or shared with others, deriving from external authority.

Opinion: a verbal expression of some belief, attitude, or value, insufficient to produce certainty.

Philosophy: the study or science of the truths or principles underlying all knowledge and being (or reality) similar to the total value system.

Value: a belief upon which a person acts by preference: an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence.

Value System: an enduring organization of beliefs, concerning preferable modes of conduct or end-states of existence along a continuum of relative importance.

APPENDIX 2

CORPORATION, GROUPS, and INDIVIDUALS POLLED
C ASTR A (Sw e den)
Allstate Group
American Cyanamid
American Optical Corporation
Amoco Oil
Argonne National Laboratory
Associated Merchandising
AT&T
Atlantic Richfield
Ballistic Research
Bel Canada
Bendix Research
Bethlehem Steel
Boeing
Boyle Engineering
Brown and Sharpe
Caterpillar Tractor
Coca-Cola
Consad Research
Dentsply International
Dow Chemical
Dow Corning
E. I. du Pont, DeNemours and Co.
Eastman Kodak
Edison Electric
Electronic Industries Assoc
Equitable Life Assurance Society
Exxon Research
First National Bank of Minneapolis
Ford
General Electric
General Foods
General Mills
General Motors
General Research
Genesco
Grumman Aircraft
Healy Foundation
Hooker Chemical
Hydro-Quebec
Imperial Chemical Industries
Institute of Life Insurance
International Business Machines
Johnson and Johnson
Lever Brothers
Mead Corporation
Metropolitan Life Insurance
Mobil Oil
Monsanto
Nabisco
Olin Corporation
Owens-Corning Fiberglas
Philip Morris
Pillsbury
Polysar Ltd
Procter and Gamble
Prudential Insurance Company
Quaker Oats
Royal Bank of Canada
Scott Paper
Scovill
Sears
Standard Oil of Ohio
Stromberg Carlson
Sun Oil
Unio-Royal
Upjohn
Volvo
Western Electric
Westavca
Westinghouse Electric
Weyerhaeuser
Whirlpool
Xerox
FUTURES GROUPS, THINK-TANKS, AND INDIVIDUALS

Battelle Memorial Institute  
505 King Ave  
Columbus, Ohio

Clement Bezol  
Institute for Alternative Futures  
Washington, D.C.

Charles Bolyard  
Director of Employee Development  
Lincoln National Life Insurance Co  
Fort Wayne, Indiana

Brooking Institution  
Washington, D.C.

Center of the Study of the Future  
Portland, Oregon

Center for Futures Research  
University of Southern California

Forecasting International, Ltd.  
Arlington, Virginia

The Future Group, Inc.  
Glastonbury, Connecticut

Futures Research Institute  
Portland State University  
Portland, Oregon

Futures Studies Program  
University of Massachusetts  
Amherst, Massachusetts

Gary Gappert, Director  
Institute for Future Studies and Research  
University of Akron  
Akron, Ohio

Betsy Gelb  
Studies of the Future  
University of Houston at Clear Lake City  
Houston, Texas

The Hastings Institute of Society, Ethics and the Life Sciences  
Hastings-on-Hudson, New York
The Hudson Institute
Croton-on-Hudson, New York

The Idea Counselors
Richardson, Texas

Information Futures
Pullman, Washington

Institute for the Future
Menlo Park, California

Institute for 21st Century Business
Kent State University
Kent, Ohio

Dr. A. G. Kefalas
Department of Management
University of Georgia
Athens, Georgia

Gary Liefkowitz
New York State Joint Labor Management Committee of Work Environment
Albany, New York

Arthur D. Little, Inc.
Cambridge, Massachusetts

Dennis Meadows, Director of the Resource Policy Center
Dartmouth College
Hanover, New Hampshire

Arnold Mitchell
VALS Program
SRI International
Menlo Park, California

Tom O'Brien, International Consultant
U.S. Department of Labor
Washington, D.C.

Predicasts, Inc
University Research Center
Cleveland, Ohio

The RAND Corporation
Santa Monica, California

Arthur B. Shostak
Sociology Dept., Drexel University
Philadelphia, Penn.
Stanford Research Institute
Center for the Study of Social Policy
Menlo Park, California

Trend Analysis Program
Institute of Life Insurance
New York, New York

The Urban Institute
Washington, D.C.

Western Behavioral Sciences Institute
La Jolla, California

Harvey Wilmeth
Northwestern Mutual Life Insurance
Milwaukee, Wisconsin

Yankelovich, Skelly and White, Inc.
New York, New York
APPENDIX 3

QUESTIONNAIRES
Dear Ms. Briley,

We would like to thank you for your interest in and prompt return of the first questionnaire. You will find the response from this round attached, along with the second questionnaire.

As is characteristic of the Delphi Method, the second round will amplify and clarify the issues introduced in the first round questionnaire.

In an effort to facilitate mutual understanding of the terms employed we offer below a brief list of working definitions.

Please read through these and complete the second questionnaire as indicated. We will appreciate your immediate return of round two, insuring you early receipt of the results of this round and the final questionnaire.

Sincerely,

Deborah Briley
3090 Wescoe
University of Kansas

Work Motives: The primary desires and/or needs which act as incentive to seek a particular job or career.

- **Independence**: Not being dependent, being able to take care of yourself, not requiring help or assistance.
- **Economic**: Having money for things you need or want.
- **Social**: Meeting and interacting with interesting people.
- **Mastery-Achievement**: Accomplishing things, doing a job well and completely.
- **Dominance-Recognition**: Prestige, fame, or authority over other people.
- **Interesting Activity**: Variety, new and unusual things to do.

Job Enrichment: A managerial attitude and strategy which falls under the rubric of planned change (organizational development). This can involve a variety of methods, many of which are interrelated.

- **Participative Decision-making**: The opportunity for employees most involved and best qualified to take part in managerial decisions.
- **Job Content**: Focusing on the adaptation of tasks to best fit the individual, which can benefit the development of that individual.
- **Teambuilding**: The organization of workers into groups or teams responsible for achieving common goals.
- **Meaningfulness**: Emphasis on the purpose or function of a job as it relates to a higher level of accomplishment, highlighting the significance of a job as it relates to an individual.
- **More Aspects of the Organization**: Educating employees as to the overall operation of an organization by participation and/or observation in an effort to create a "whole picture."
I

Compared with today, estimate the significance of the following as you predict they will be valued by the employee by the year 1990.

MORE          SAME         LESS

Emphasis on the work motive of:

1. Independence
2. Economic
3. Social
4. Mastery-Achievement
5. Dominance-Recognition
6. Interesting Activity

MORE          SAME         LESS

Emphasis on the job enrichment strategies of:

1. Participative Decision-Making
2. Job Content
3. Teambuilding
4. Meaningfulness
5. Whole Picture, More Aspects

II

Compared with today, what is your prediction on how strongly managers in the year 1990 will value each of the following employee attributes or behaviors?

MORE          SAME         LESS

1. Company loyalty
2. Individual efficiency, productivity
3. Cooperation with co-workers
4. Desire for personal growth
5. Commitment to the organization
6. Independent thinking
7. Low absenteeism
8. High self-motivation
9. Individual creativity, imagination
10. Personal honesty, credibility
11. Stay with company, non-turnover
12. Personal concern for others
Apart from your previous predictions about changes in the factors below, please indicate how significant each factor will be in the year 1990—how much will it matter? Also, circle the number of each factor about which you feel reasonably confident in the predictions you have made—perhaps a 75% probability.

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<thead>
<tr>
<th>Very Significant</th>
<th>Fairly Significant</th>
<th>Not Very Significant</th>
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<td>3. Social</td>
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<td>4. Mastery-Achievement</td>
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<td>5. Dominance-Recognition</td>
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<td>6. Interesting Activity</td>
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Comments ________________________________________________

Job Enrichment Strategies.

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<td>1. Participative Decision-Making</td>
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<td>3. Teambuilding</td>
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<td>4. Meaningfulness</td>
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<td>5. Whole Picture, More Aspects</td>
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Comments ________________________________________________

II

Complete as above, also circling the numbers of the predictions you feel most confident.

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<td>1. Company Loyalty</td>
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<td>2. Individual efficiency, productivity</td>
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<td>4. Desire for personal growth</td>
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<td>5. Commitment to the organization</td>
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<td>8. High self-motivation</td>
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<td>9. Individual creativity, imagination</td>
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<td>11. Stay with company, non-turnover</td>
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<td>12. Personal concern for others</td>
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Comments ________________________________________________
III Check each of the following broad categories in which you would expect training priorities to be high by the year 1990. Also indicate specific areas that will be emphasized under each category.

**Communication**

- Interviewing
- Listening Skills
- Writing Skills
- Group Dynamics
- Effective Meetings
- Giving Feedback
- Making Presentations
- Media Utilization
- Interpersonal Relations "Downward Comm one-on-one"

**Conceptual Skills**

- Problem Solving
- Creativity
- Forecasting
- Goal-Setting
- Time Management
- Planning
- Decision-Making
- Organizational Skills

**Human Relations**

- Emphatic Understanding
- Supportive Climate
- Personal Responsibility
- Perceptual Accuracy
- Conflict Resolution
- Self Confidence
- Trust
- Morale
- Assertiveness
- Confidence (self-worth)
- Training

**Technical Skills** Job Related-Job Specific
Apart from your previous predictions about changes in the factors below, please indicate how significant each factor will be in the year 1990—how much will it matter? Also, circle the number of each factor about which you feel reasonably confident in the predictions you have made—perhaps a 75% probability.

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<thead>
<tr>
<th>Factor</th>
<th>Very Significant</th>
<th>Fairly Significant</th>
<th>Not Very Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Independence</td>
<td></td>
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<tr>
<td>2. Economic</td>
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<tr>
<td>3. Social</td>
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<tr>
<td>4. Mastery-Achievement</td>
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<tr>
<td>5. Dominance-Recognition</td>
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<tr>
<td>6. Interesting Activity</td>
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Comments ____________________________

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Job Enrichment Strategies

<table>
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<th>Strategy</th>
<th>Very Significant</th>
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</thead>
<tbody>
<tr>
<td>1. Participative Decision-Making</td>
<td></td>
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<tr>
<td>2. Job Content</td>
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<tr>
<td>3. Teambuilding</td>
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<tr>
<td>4. Meaningfulness</td>
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<tr>
<td>5. Whole Picture, More Aspects</td>
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</tbody>
</table>

Comments ____________________________

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II Complete as above, also circling the numbers of the predictions you feel most confident.

<table>
<thead>
<tr>
<th>Prediction</th>
<th>Very Significant</th>
<th>Fairly Significant</th>
<th>Not Very Significant</th>
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</thead>
<tbody>
<tr>
<td>1. Company Loyalty</td>
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<td>2. Individual efficiency, productivity</td>
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<td>3. Cooperation with co-workers</td>
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<td>4. Desire for personal growth</td>
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<td>5. Commitment to the organization</td>
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<td>6. Independent thinking</td>
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<tr>
<td>7. Low Absenteeism</td>
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<td>8. High self-motivation</td>
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<td>9. Individual creativity, imagination</td>
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<td>10. Personal honesty, credibility</td>
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<td>11. Stay with company, non-turnover</td>
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<tr>
<td>12. Personal concern for others</td>
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</table>

Comments ____________________________
Check each of the following broad categories in which you would expect training priorities to be high by the year 1990. Also indicate specific areas that will be emphasized under each category.

### Communication
- Interviewing
- Listening Skills
- Writing Skills
- Group Dynamics
- Effective Meetings
- Giving Feedback
- Making
- Presentations

### Conceptual Skills
- Problem Solving
- Goal-Setting
- Decision-Making
- Creativity
- Time Management
- Planning
- Organizational Skills

### Human Relations
- Emphatic
- Supportive
- Personal Understanding
- Climate
- Responsibility
- Perceptual
- Conflict
- Self Confidence
- Accuracy
- Resolution
- (self-worth)
- Trust
- Morale

### Technical Skills
- Job related
- Job Specific
Please estimate the direction and degree of change you predict in the following areas by the year 1990

1. Government Regulations
2. Average Size of Business/Organizations
3. Emphasis on Innovation/Creativity
4. Emphasis on Organizational Democracy
5. Emphasis on Self-Development
6. Emphasis on Efficiency
7. Economic Abundance in the Society
8. Average Worker's Hours per Week
9. Women and other Minorities in Labor Force
10. Trend Toward a Cooperative Ethic
11. Managers' Need for Thinking Skills
12. Managers' Need for Technical Skills
13. Managers' Need for Communication Skills
14. Managers' Need for Human Relations Skills

Rank the top five work motives you predict will be predominant by the year 1990.

Independence
Economic
Social
Mastery-Achievement
Dominance-Recognition
Interesting Activity

Rank the top five job enrichment priorities

Participative Decision-Making
Job Content
Teambuilding
Meaningfulness
More Aspects of Organization
BIBLIOGRAPHY


American Council of Life Insurance. Trend Analysis Program


Enger, Selwyn, Helmer, Olaf, and Gray, Paul (1975). Alternative Futures for California Center for Futures Research, University of Southern California

Erickson, Rosemary (1978). Some Issues in America in the 1980's Western Behavioral Science Institute, La Jolla, California.


FORTUNE Magazine "The U S Economy in the '80's " Part 1 in a series, October, 1979


Friedman, John (1973) Retracting America A Theory of Transactive Planning (New York Doubleday Anchor)


Gordon, T J , and Hayward, H (1968) "Initial Experiments With the Cross-Impact Matrix Method of Forecasting," in Futures


Gross, Charles W, and Peterson, Robin T (eds ) Business Forecasting (Boston Houghton Mifflin)

Gufielmine, Paul (1979) "Developing the Top-Level Executive for the 1980's and Beyond," Training and Development Journal

Hall, Owen P (1974) "Regional Policy Analysis by Computer Simulation," Center for Futures Research, UCLA


Herzberg, F (1966) Work and Nature of Man (New York World)


Lawrence, P R and J W Lorsch (1969) Developing Organizations: Diagnosis and Action (Reading, Mass Addison-Wesley).


Linstone, H A and Turoff, M eds (1975) The Delphi Method: Techniques and Applications (Reading Mass Addison-Wesley)

Livingston, Dennis. "The Study of Science Fiction as a Forecasting Methodology" From Proceedings of the International Futures Research Conference, 1970, Tokyo, Japan

Livingston, J S "The Myth of the Well Educated Manager" Training and Development Journal (Madison, WI ASTD)


Lynch, Dudley "Next Important Frontier Is the Human Brain" Training and Development Journal (Madison, WI ASTD)

Maccoby, Michael The Gamesman, 1975


Madden, Carl H., Clash of Cultures *Management in an Age of Changing Values*, Report No 133 (Washington, D. C National Planning Association)


Mitchell, Arnold VALS Program, SRI International, Menlo Park, California

Mouland, Frank L "Dialectic Methods in Forecasting," *The Futurist*

Morris, DuBois S., Jr ed Perspectives for the '70's and '80's, an experimental Forecast conducted by the National Industrial Conference Board, Inc. and the Opinion Research Corporation

Naisbitt, John. "The Five Trend-Setting States," *TWA Ambassador*

National Observer January 10, 1976

O'Toole, James, Brousseau, Kenneth, and Ralston, August "Employee Entitlements in the Eighties," Report F-38 (Los Angeles, California Center for Futures Research, December, 1979)

Posner, Barry, and Munson, J Michael "The Importance of Values in Understanding Organizational Behavior," *Human Resources Management*

Psychophysiology "Right and left-Brain Strategies of Managers and Planners " 14

Pyke, Donald L (1973) Comprehensive Technological Forecasting (Los Angeles, Center for Futures Research, University of Southern California)


Schon, Donald (1971) *Beyond the Stable State* (New York Random House)

Schumacher, E F (1973) *Small is Beautiful* . (New York Harper and Row)

Scott, W G and T R Mitchell (1972) *Organization Theory* (Homewood, Ill. Irwin-Dorsey)


Stephens, James C (1977) *Managing Complexity Work Technology and Human Relations* (Mt Airy, MD Lomond Books)


