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CORPORATE STRATEGIC PLANNING:
SOME PERSPECTIVES FOR THE FUTURE
AND A PROPOSAL FOR FUTURE RESEARCH

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BACKGROUND

The concepts discussed here are derived from extensive discussions with corporate planners in banking, utility, and manufacturing corporations. These discussions were conducted as part of a research project designed to ascertain the "state of the art" in corporate strategic planning and to develop research programs to improve the planning process. The opinions offered are, of course, solely those of the author.

ABSTRACT

The intent of this paper is to offer some conjectures on coming changes in the philosophies, techniques, and horizons of corporate strategic planning. Some implications of these changes regarding the future of research into the planning process are examined, and a specific research proposal is developed to study one aspect of this process--the role of forecasting in strategic corporate decisions.

Introduction

Before embarking on any discussion of corporate planning, one should recognize that not all corporate managers are enamored with the subject of planning. There are those who argue that we shouldn't plan --that "if we take care of the present the future will take care of itself." And there are those who argue that even if we should plan, we can't-- that "the future is too complex and difficult to anticipate." Finally, there are those who argue that even if we should and can plan, we won't --that the most significant planning done in corporations today is deciding where to go for lunch and what to have.

The remarks in this paper are based on the premise that corporations can, and must, plan for the future. The accelerating pace of change in our society, the growing complexity of the future effects of current decisions, and increasing regulatory and competitive pressures are all contributing to an environment which the business firm must anticipate and influence in order to meet its objectives of growth and survival. At the same time these factors create an enlarged demand for planning, however, they will also change the philosophies, the techniques, and the horizons of planning. These coming changes are the topic of this paper.

Some Perspectives for the Future

Evolving Conceptualizations of the Planning Process

One major change which is already being recognized by progressive firms is an awareness that planning is a process of anticipatory decision making^{1/}--not a collection of forecasts and unimplemented futuristic studies. While forecasting is a part of this planning process, planning does not really take place unless forecast predictions form the basis for subsequent actions designed to influence the future states of the organization.

It is useful to explore in some detail the various facets of this decision-making process in order to clarify the role of strategic planning within the firm. One conceptualization of these facets is presented in Figure 1. In this figure, strategic (long-range) planning is distinguished from tactical (short-range) planning by the three factors proposed by Ackoff:^{2/}

1. Goal formulation as an integral part of strategic planning
2. Broad scope of strategic plans
3. Enduring (long-term) effects of strategic plans

Of course, in a well-structured planning process, strategic and tactical plans should be highly interdependent; these interdependencies are

^{1/} This definition is consistent with that promoted by R. L. Ackoff in A Concept of Corporate Planning (New York: John Wiley & Sons, Inc., 1970).

^{2/} Ibid., pp. 4, 5.

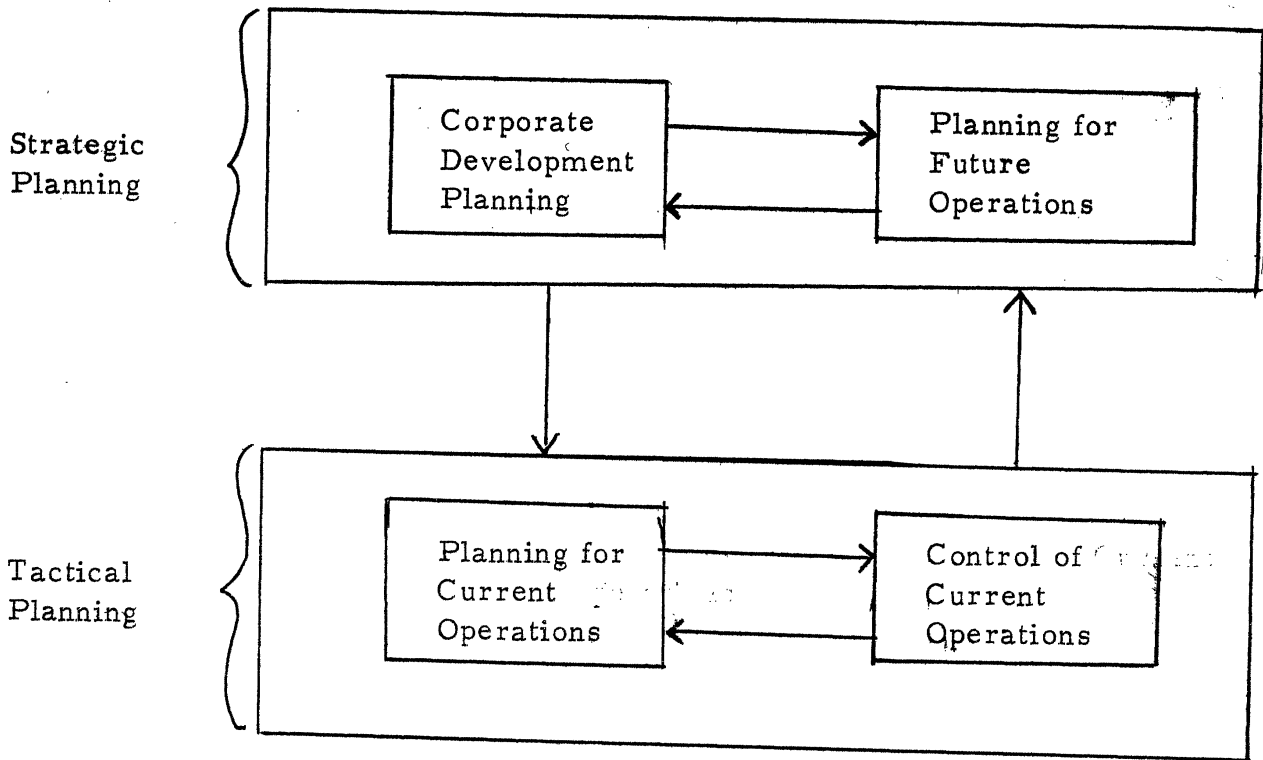


Fig. 1. Facets of the corporate planning process.

indicated by the feedback arrows in Figure 1.

Strategic planning can be further broken down into corporate development planning, which is devoted to the determination of resource selection strategies, and future operations planning, which is devoted to the determination of resource allocation strategies for future time periods. Here again, a strong interdependency exists between these facets.

To complete the taxonomy of Figure 1, tactical planning can be devoted to current operations planning, to the determination of resource allocation strategies within the current planning period, and to current operations control--the measurement and sequential improvement of this allocation process. The two-way interactions between operational planning and control form the basis for almost all budgeting and management control policies which are currently implemented in modern corporations.

It can also be useful to decompose the process of strategic planning into a set of sequential activities (Figure 2). The breaking-down process is initiated by an organized search for consensus on long-term corporate objectives and alternative means for achieving these objectives. Following this search, planning research must be conducted to determine the technological and organizational feasibility of alternative actions. The results of this research, combined with forecasts of various environmental factors, then lead to an analysis of these alternatives and eventually to consensus on a set of proposed actions. The implementation of these actions then serves as a feedback loop, which

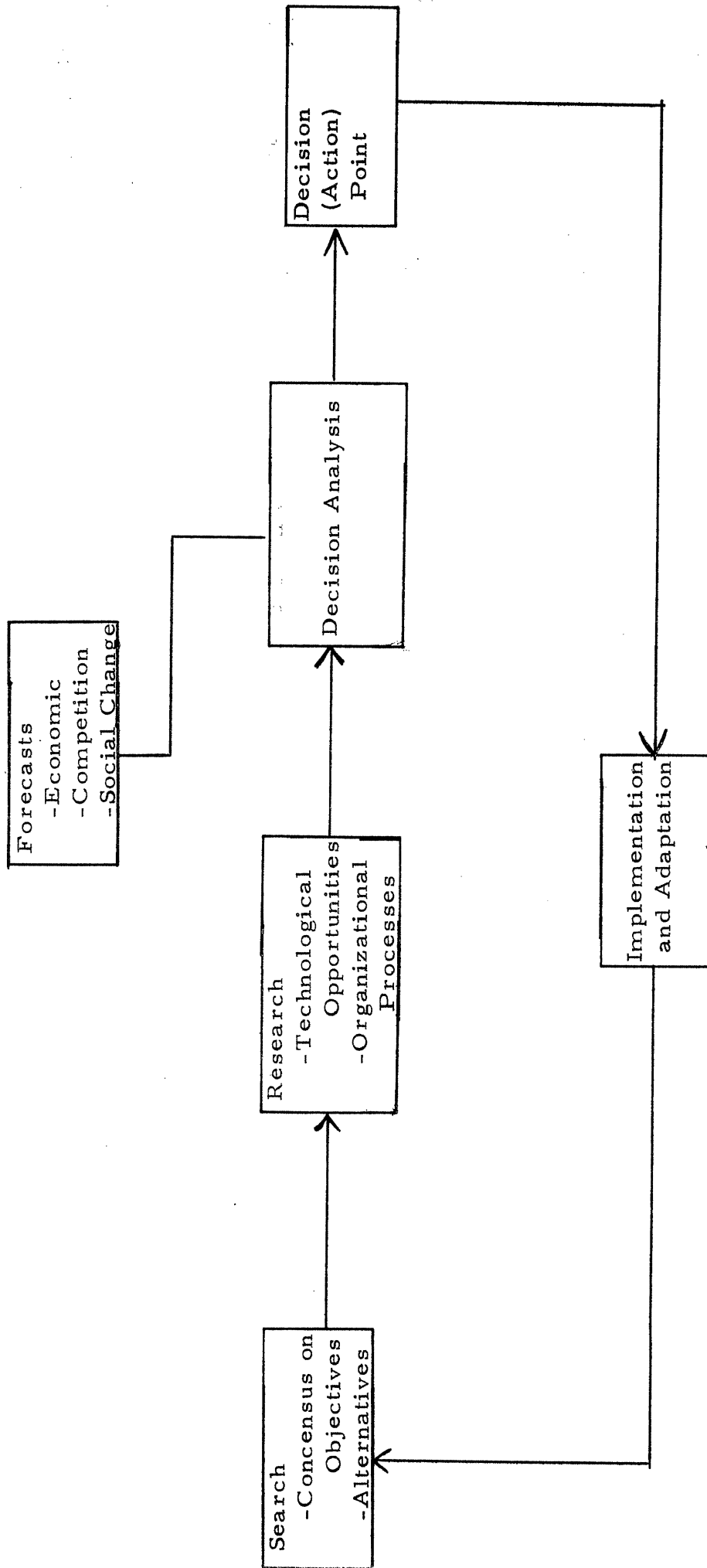


Fig. 2. A conceptualization of the strategic planning process.

iteratively results in the adaptation of the planning decisions to changing conditions and objectives.

This conceptualization of the strategic planning process represents a major change in at least three areas of the traditional philosophy of long-range planning:

1. The emphasis is on the process of planning rather than the results of planning. An increasingly large number of corporate officials firmly believe that the major benefit of strategic planning lies in the involvement and commitment of employees to the future welfare of the organization and not in a carefully bound document titled "The Five-Year Plan for Company X."
2. The emphasis is on the "research-oriented" nature of planning rather than on the "control-oriented" nature. In fact, there is a growing awareness that the key to successful planning is to encourage and promote innovative thinking, not to develop procedures solely to measure and evaluate performance.
3. The emphasis is on the continuous, adaptive nature of the planning process. This emphasis promotes the idea that strategic decision making should be an ongoing activity of corporate employees and not a special activity to be conducted only at certain times of the year.

Evolving Techniques for Strategic Planning

Associated with the changing philosophies toward planning are an evolving set of new techniques for improving the planning process. These techniques involve the employment of systems analysis procedures and mathematical models in the planning process.

Systems Analysis

Systems analysis is a phrase which is certainly overused in our society. Nevertheless, the explicit consideration of the interactions among the elements of an organization (the emphasis on the "whole"

rather than the "parts") is beginning to yield major benefits in the planning process.

One application of systems analysis has resulted in the implementation of formal planning systems--an integrated set of policies and procedures designed to improve the anticipatory decision-making process. While there are many examples of formal systems in tactical planning (the budgetary system is the most common), there are few examples in strategic planning at the present time. Still, there is no doubt that the tendency to formalize strategic planning will grow. Such formalization is essential to motivate members at all levels of the organization towards thinking ahead to define future goals, means, and resources, and in addition, to get the "doers" involved in the planning of their future activities.

A second application of systems analysis will result in integrated planning and control systems. As we have seen earlier, there is a growing awareness of the need to build evaluation and adaptation into the planning process. Moreover, there is a growing awareness of the need to integrate the planning activities of different levels and of different functional areas within the organization. This concern will result in a growing number of approaches to strategic planning involving "matrix" management task forces and in a tendency toward program-oriented organizational structures rather than the long-established functional, product-oriented, geographic structures.

A third and exceptionally important application of systems

analysis will result in the growth of innovational planning systems within the firms. A large number of firms start the planning search with an analysis of current goals, resources, and means within the firm. Policies are then developed which project and sequentially develop these into the future. The problem with this procedure, of course, is that the planning is necessarily constrained by a tendency to think in terms of present products, markets, and organizational structure. Innovational planning avoids this set of constraints by initiating the process with a search for a consensus on what constitutes an "idealized" future for the firm. From this future position, policies are then generated backward in time so that current decisions lead toward the desired future rather than perpetuate contemporary practice.

Innovational planning is almost certain (or very likely) to supplement traditional systems in the next twenty years and may even replace them. There are two major reasons for this conclusion:

1. In our rapidly changing society more firms are recognizing that the successful implementation of an innovative alternative (a new product, production process, organizational structure, etc.) does more to increase corporate profitability than a refinement in existing practice.
2. As the rate of change accelerates, past policies, tools, and data will become increasingly less useful in developing practical policies for the future. In his recent best seller, Toffler^{3/} makes this point clear in discussing the future of economics: "Before such an upheaval [in the purpose of eco-

^{3/} Alvin Toffler, Future Shock (New York; Random House, Inc., 1970).

economic activity] even the most sophisticated tools of today's economists are helpless. Input-output tables, econometric models--the whole paraphernalia of analysis that economists employ simply do not come to grips with the external forces...that will transform economic life in the decades before."

A drastic transformation in the nature of planning will result when it is recognized that the benefits of innovation outweigh those of evolution and that knowledge of the past is becoming increasingly less useful in controlling the future. In addition, realizing these facts will change our conceptualization of models in the planning process.

Mathematical Models

Mathematical models offer a major new technique, and these are finding increased applications in strategic planning. It is appealing from a cost, convenience, and intellectual point of view to abstract the real world into a simplified set of relations which can be manipulated to aid in anticipating the future effects of current decisions. Various considerations which should be taken into account in applying models to strategic planning have been proposed by many authors,^{4/} and it would be redundant to repeat them here. Nevertheless, the future role of models in strategic planning will be different from the contemporary role in several important ways:

1. There will be a growing recognition that the process of modeling is just as important as the ultimate product of this modeling effort. A large number of contemporary planning models have recently been scrapped because

^{4/} See, for instance, G. L. Barkdoll, "Using Financial Models to Improve Communications," Managerial Planning, May-June 1971.

(a) conditions have changed since the time of development, thereby affecting model's validity, and (b) personnel have changed since the time of development, thereby affecting model's credibility or implementation. Explicit recognition that the process of model building is valuable in creating new insights and concepts will increase the use of these activities as planning research techniques rather than as research objectives.

2. There will be a growing recognition that large financial simulation models constructed from an extensive statistical analysis of the firm's data system do not offer significant aids in the process of anticipatory decision making. This recognition will evolve for two reasons. First, more modelers will discover that a model developed by using data to associate certain independent variables with other dependent variables can never be used to determine how changes in the independent variables cause changes in the dependent variables. Since projected cause-effect relationships form the basis for evaluating decisions, these associative models will receive much less emphasis in the future. Second, as was pointed out earlier, the accelerating rate of change in society is making historical data of less use in planning and hence in planning models.
3. There will be a growing tendency to construct models which explicitly incorporate stylistic objectives, the influences of organizational structure on behavior, and other behavioristic factors. Normative models based upon "idealized" decision-making behavior will become less useful as the importance of these intangible factors is recognized and incorporated into the planning process.

Evolving Environments for Strategic Planning

As techniques for the conduct of strategic planning change, so will the environments which anticipatory decisions attempt to influence. At this point, it is useful to discuss briefly these new environments.

External Environmental Factors

Four new external developments affecting the environment of

the firm will offer growing challenges to the planning process over the next two decades: consumerism, internationalism, governmentalism, and environmentalism.

There is little question that contemporary organizational planning has largely failed to anticipate and influence the current changes in consumer attitudes and demands upon the corporation. Since the behavior of consumers will grow more complex and, simultaneously, since their demands for truth and quality will become stronger, there is a growing awareness that these factors must be explicitly taken into account in the strategic decision-making process.

The threats and opportunities posed by an increasingly international economic environment offer another challenge. Clearly the recent "crisis-oriented" responses to foreign competition must be supplemented with long-term plans designed to change both management and products so that this competition can be met or joined to promote the firm's welfare. Simultaneously, the opportunities offered by foreign countries with accelerating rates of growth should be anticipated and taken advantage of through the creation of multinational enterprises and new product offerings.

The public sector of our economy is the fastest growing sector, both in terms of size and the scope of its activities, and there is no doubt that this trend will continue. The current tendency to react only after governmental intervention and regulation are proposed must be replaced with a long-term plan designed to anticipate

and favorably influence such actions. One recent example of such long-range planning is provided by several public utility companies. They are keeping state regulatory agencies informed of their strategic planning activities in an attempt to educate these agencies about the enduring effects of current rate and capacity decisions. This type of planning for "governmentalism" will grow rapidly over the next decade.

The recent clamor for reducing the external diseconomies created by private enterprise has been highlighted by demands for increased ecological responsibility. Here again, the corporate tendency to fight back--with claims that these effects are the "price of production"--must be replaced with a long-range plan to forecast environmental effects, to determine the real costs of these effects, and to study technologies for alleviating those effects which are truly adverse. An example of such planning is provided by the recent decision of a large manufacturer to build electrostatic precipitators rather than to fight antismoke regulation. The result is a new, highly profitable product which will eventually form the basis for a new corporate division.

Internal Environments

The demands for long-range planning also prevail because of changing conditions within the corporation, notably in employee relations and organizational structure.

Since the employee is a consumer of the services and external

diseconomies produced by the corporation, his attitudes toward these factors will increasingly influence long-range corporate policy. Moreover, long-range policies will have to be developed to incorporate evolving employee goals as these change from economic gain toward increased personal job satisfaction. Simultaneously, plans must be developed to alleviate the personnel problems introduced as the pace of work automation accelerates.

Changes in organizational structure will be necessary to implement these new policies concerning employees and at the same time to implement long-range plans directed at other problems. Clearly, improvements in the structure of decision making offer an area for active planning research. For instance, it is well known that many potentially profitable alternatives for new products and processes currently "die" at lower levels of the organization because of inadequate support for and commitment to these ideas. The development of purposeful plans for adaptively improving this structure to alleviate such problems obviously has a high payoff in improving organizational performance.

Some Implications for Research into the Planning Process

The intent in this paper has been to propose some philosophical, technical, and environmental changes which will affect the future conduct of strategic planning. While some of these changes

are speculative, there is no doubt that the majority will occur in those organizations which successfully adapt to a rapidly changing future. Still, it must be observed that at the present time the rate of initiation for these changes is slow, even in the most progressive contemporary corporations. In the opinion of this author a major research effort will be necessary to increase this rate of "planning for planning." Such research must be directed at improving our understanding of the actual strategic decision-making process within the organization. Normative theories, laboratory experiments, and models have helped in this regard, but significant field research must be conducted to complete the effort. The significance and potential payoffs from this type of research can best be illustrated through a concrete proposal. Consequently, a proposal for field research into the role of forecasting in the strategic planning process is outlined in the next section.

Forecasting in the Strategic Planning Process--A Research Proposal

It is generally agreed that forecasting is a key activity in the formulation of corporate strategic (long-range) plans. Because of its importance, extensive research has been devoted to developing new forecasting techniques and to applying these techniques in specific forecasting situations.^{5/} While these research activities have no

^{5/} See, for instance, the article by Chambers, Mullich and Smith, "How to Choose the Right Forecasting Technique," Harvard Business Review, July-August 1971.

doubt advanced the state of the art in forecasting methodology, our knowledge of the role and effect of this methodology on the strategic decision-making process remains very limited. Since forecasting must be viewed as a part of this process and not as an end in itself, research into the complex relationships between forecasting and strategic decision making is essential in improving the conduct of strategic planning. This research project is designed to provide some preliminary insights into these relationships.

The intent is to study the conduct of forecasting in the context of planning for both new products and capital expenditures. The traditional view of forecasting in these decision situations was shown in Figure 2. In that figure it was observed that forecasts serve as one of the inputs to the decision analysis phase of the process. Three major assumptions are commonly associated with this conceptualization:

1. Forecasts are the major "limiting factor" in the decision analysis phase of the planning process.
2. Improved "accuracy" in forecasting will improve the quality of the actions taken at the decision point in the planning process.
3. Objectivity in forecasting is an important (and desirable) factor which influences both the selection of forecasting methodologies and the forecast results.

The objective in this project is to explore these three assumptions in greater detail. Such an exploration is desirable because some recent evidence seems to cast doubt on the validity of the above premises. A

brief presentation of this evidence is appropriate here to motivate the proposed research.

A recent article in Business Week magazine clearly supported the "limiting factor" assumption in a discussion of the effect of public utility demand forecasts on recent generating capacity decisions.^{6/}

Consider, for instance, the following statement:

At least since 1965, major utilities in the Northeast have failed to predict future peak loads; thus, there has not been enough preparation for currently needed generating capacity. This dearth of capacity is a direct outgrowth of the conventional wisdom of the early Sixties. . . . Planners picked up their slide rules and drew neat five-year trendlines that foresaw a declining rate of peak demand growth.

Yet, in refutation of this statement, personal discussions with planners for these utilities indicate that their forecasts may indeed have predicted the capacity problems of the late sixties. The real problems, these planners argue, was in implementing (financing) new capacity under exceptionally tight monetary conditions and under adverse public and regulatory pressure regarding rate increases and potential ecological problems. As one planner laments, "The forecasts were right; our decisions were wrong!"

Further evidence on the limited role (rather than the limiting role) of forecasts in decision making comes from a recent analysis of how long-range forecasts of environmental and cultural develop-

^{6/} "How Wrong Forecasts Hurt the Utilities," Business Week, Feb. 13, 1971, pp. 44-46.

ments (futurist studies) may influence the strategic plans of a major company:^{7/}

It has been the experience of one of the most conscientious and sophisticated of the organizations doing futurist studies that most organizations are so narrow in their perceptions of their relationship to the larger society, and so unfamiliar with the processes of thinking from the future back into the present, that futurist studies are useless to them.

The associated research questions are these: (1) to what extent do forecasts influence corporate strategic decisions? and (2) in what ways do they influence this decision-making process? Answers to these questions should provide further insights into means for improving the interactive nature of forecasting and strategic decision-making.

Closely related to these questions about the role of forecasting are questions concerning the evaluation of forecasting procedures and forecast results. As was indicated earlier, a common assumption is that improved accuracy in forecasting--"closeness" between predicted and actual (ex post) results--should improve the quality of the actions taken at the strategic decision point. Yet here again recent evidence seems to refute (at least partially) this hypothesis.

Consider, for instance, the earlier example of forecasting the demand for public utility services. It seems obvious that the costs

^{7/} D. M. Michael, On the Social Psychology of Organizational Resistances to Long Range Planning, University of Michigan Institute of Social Research, 1971.

(actual and opportunity) of decisions based on underforecasts of demand are significantly different from those based on overforecasts. In these cases it is not accuracy, but the costs of errors which should be considered in evaluating such forecasts.

As a second example, consider the following situation. A corporate financial analyst, when asked how sensitive his capital investment decisions were to forecasting errors on the order of 10 per cent, quickly responded, "Not at all." This author hypothesizes that similar insensitivities prevail in many organizations. If so, the implication is that forecast evaluation criteria must be developed which take into account the impact of forecasts on decisions and not simply the accuracy of forecasts in minimizing the deviations between predicted and attained results.

A third question should also be raised with respect to forecast accuracy. A popular trend in contemporary management science involves the development of corporate long-range financial forecasting models. One recent article extolling the virtues of these proudly claimed:

Multiple regression analysis proved to be very useful in producing equations that permit accurate forecasts. It involved finding the correct independent variables and adding them to existing equations to form more complex and accurate ones. . . . Accuracy tests made for the last two years indicate that, if correct values are specified for all inputs (independent variables), the (forecasting) model can project a level of net income within 1% of actual for one year into the future.

The problem with evaluative statements such as these is that the

objective in financial forecasting efforts is to study how alternative financial decisions cause or explain future performance. Yet regression analysis of historical data is completely inappropriate for this.

As de Neufville^{8/} has observed:

The statistical closeness of an equation to a set of observational data on a system is not a sufficient test of its validity. . . . Indeed, an example can be reputed to fit existing data quite closely even though it is actually quite opposite to the valid causal model.

Clearly, predictive accuracy is not an appropriate measure for the evaluation of forecasting models such as these. Instead, the models must be evaluated in terms of their ability to aid in the search for improved alternatives, since an accurate forecast of an undesirable future is useless unless such a forecast leads to an effective search for alternative methods for improving this future. Consequently, another objective of the proposed research will be to seek ways for incorporating explanatory forecasting (as opposed to predictive forecasting) into the strategic decision-making process.

Closely related to the assumption of accuracy in forecasting is the belief that forecasts should be based upon an objective analysis of relevant facts and data. This belief has led to the formulation of large forecasting "data banks" and to the search for normative, formal forecasting models. Yet forecasting may not in fact be an objective part of the strategic decision-making process. Consider, for instance,

^{8/} Richard de Neufvill, Systems Analysis for Engineers and Managers. (New York: McGraw-Hill Book Co., 1970).

the statement made to this author by a product planning manager in a large industrial firm.

We have in our organization a phenomenon I call the "up-down effect" in forecasting the sales of new industrial products. The forecasts keep going up over time until the marketing director approves the product for introduction. Then, for some reason (jokingly), the forecasts continually go down.

A statement by Bower in his recent book^{9/} reinforces this personalistic view of forecasting:

A forecast, understood in context, must be regarded as a move in a complicated game with economic, organizational, and interpersonal implications. The forecast cannot be evaluated apart from the manager who is its source.

The implication of these statements is that the conceptual role of forecasting in planning which was presented in Figure 2 is wrong. Forecasting does not simply serve as an input to the decision analysis phase. Instead the stylistic objectives and types of organizational behavior which are a part of the decision analysis process may interactively influence the forecasting phase. If this is in fact true, the normative approaches to forecasting and planning which are currently being developed must be modified to account for and positively incorporate this feedback in order to be of use in improving the decision-making process.

In summary, then, the objectives of the research proposed here

^{9/} J. L. Bower, Managing the Resource Allocation Process (Cambridge, Mass: Harvard University Press, 1970).

will be (1) to determine the actual role of forecasting in strategic decision-making, and (2) to develop new ways for evaluating and improving this role.

The primary methodology to be employed in the project will be extensive field research with several noncompeting industrial firms. The author hopes to study in depth the strategic forecasting process for these firms as it has been applied to current and past decisions in the areas of new product planning and capital expenditure analysis. From these case studies, a general conceptual model will be evolved which portrays the actual, underlying role of forecasting in the decision-making process. In addition, general criteria for conducting forecast evaluations and for examining the effects of commitments on forecasts will be developed. Of course, all data and policies followed within specific firms will be kept confidential if the firms so desire.

This project will be conducted as a part of an informal research program at the University of Michigan Graduate School of Business on planning and organizational change. Participants in this project will have access to the results of all research projects in the program and, in addition, will be informed of special seminars and other educational activities at the University which are related to the general problem of contemporary organizational planning.

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