Reconciling Logical Incrementalism and Synoptic FormalismAn ...

Camillus, John C Strategic Management Journal (pre-1986); Jul-Sep 1982; 3, 3; ProQuest Central

Strategic Management Journal, Vol. 3, 277-283 (1982)

Reconciling Logical Incrementalism and Formalism—An Integrated Approach to Designing Strategic Planning Processes

- JOHN C. CAMILLUS
- · Graduate School of Business, University of Pittsburgh, Pittsburgh, Pennsylvania, U.S.A.

## Summary

The advocates of logical incrementalism and synoptic formalism in strategic planning emphasize, respectively, the interactive and analytical dimensions of the planning process. This paper suggests a framework for designing planning processes that permits a symbiotic integration of both approaches. In particular, synoptic exercises scheduled at intervals of more than a year, with incremental exercises in the intervening years are recommended.

of thought. First, there is the stream referred to in this paper as adhering to 'synoptic formalism' or labelled by others (Grant and King, 1979) as 'comprehensive planning'. This school has its roots in the model of strategy formulation articulated by Andrews (1971) and has been typified over the years by Ansoff (1965, 1977), Steiner (1969, 1979), Lorange and Vancil (1977), King and Cleland (1978), and Lorange (1980). Second, there is the stream that probably has its origins in the concept of 'bounded rationality' (Simon, 1957) as has been expounded on by Lindblom (1959), Braybrooke and Lindblom (1963), Wrapp (1967), Hedberg, Nystrom and

Current literature on corporate planning processes is sharply divided into two distinct streams

Starbuck (1976) and Quinn (1980). The distinction must be made that Simon (1957) describes the inevitable consequences as he perceives them, of complex decision situations and the cognitive limitations of decision-

makers. Lindblom (1959), again, attempts to describe the realities of complex decision situations rather than focusing on normative responses to these complexities. However, Wrapp (1967), Hedberg, Nystrom and Starbuck (1976) and Quinn (1980) clearly adopt a normative stance, based both on logic and empirically derived insights. It must be recognized, therefore,

that just as Ansoff (1965), King and Cleland (1978) and Lorange (1980) offer their own, distinct models of synoptic formal planning, what has been labelled the incremental school embraces significantly different approaches and intents. Certainly, the label 'logical incrementalism' does not adequately describe Lindblom's (1959) concept of 'muddling through', or Braybrooke and

Lindblom's (1963) 'disjointed incrementalism'; nor does it fully reflect the paradoxical prescriptions of Wrapp (1967) and Hedberg, Nystrom and Starbuck (1976). However, by virtue of its explicit consideration of these ideas and as a consequence of it being the most recently

developed, Quinn's (1980) description of 'logical incrementalism' is by far the most clear-cut and fully developed alternative to the views of the advocates of synoptic formalism. Received 10 February 1981 Revised 27 January 1982

### NEED FOR AN INTEGRATIVE FRAMEWORK

formalism. However, apart from a delineation of his views on how to improve the quality of formal planning and a recognition of the need for a synoptic perspective to provide direction to incremental thrusts, little is offered by way of practical approaches to effecting the integration that he perceives and states to be desirable. The proponents of synoptic formalism, and the vast majority of practitioners appear to

Quinn (1980) does make an attempt to integrate logical incrementalism and synoptic

belong to this group (Walter, 1980), do not even recognize let alone attempt to respond to the imperatives deriving from an acceptance of logical incrementalism. This is understandable, as it can be argued that synoptic formalism is the ideal, 'rational' way to approach problem solving and that strategic planning is essentially a problem solving approach to business planning (Bower, 1967). Even Simon (1977:52, 53, 130) can be interpreted as sharing this viewpoint. Thus the prescriptions of Wrapp (1967), Hedberg, Nystrom and Starbuck (1976) and Quinn (1980) can be viewed as premature desperation rather than dawning pragmatism; the fact that organizations do not engage in or often fail effectively to implement synoptic

formal planning systems represents unnecessarily poor practice or evolution toward the normative, synoptic ideal. While group processes and organization culture are not entirely ignored by synoptic formalists (King and Cleland, 1978), adequate importance is not given to the fact that in

complex organizations, 'rationality' lies in the eye of the beholder (Simon, 1957) and that personal values, relative power and group processes (Guth and Tagiuri, 1965; Prahalad, 1976; MacMillan, 1978; Summer, 1980) substantially influence or colour whatever rational point of view is adopted. Furthermore, the allocation of responsibility for carrying out elements of the synoptic formal exercise is a variable that can clearly affect the outcome (Delbecq, Van de Ven and Gustafson, 1975; Janis and Mann, 1977). Finally, in complex organizations and complex environments the number, sequencing and specified duration of the analytical tasks certainly allow a variety of approaches (Berg and Pitts, 1979) that can result in vastly different outcomes. It is evident that while synoptic formalism can be advanced as a normative ideal, practical realities demand the recognition of dimensions other than the rational and synoptic. Logical incrementalism recognizes these basic realities—that power, politics and social processes are at work and that independently functioning subsystems are often a necessary and almost inevitable concomitant of synoptic formal systems. Nevertheless, if incrementalism is to be logical and not piecemeal it is essential that an organizational perspective and organizational aspirations lend direction and commitment to incremental efforts (Quinn, 1980). In short, reconciling synoptic formalism and logical incrementalism so as to exploit the rational idealism

## THE ESSENTIAL DIMENSIONS

endeavour to increase the effectiveness of strategic planning in organizations.

and human awareness, respectively, of each approach is a desirable if not imperative facet of the

The single most important common thread that runs through all synoptic formal approaches is the reliance on an analytical framework that is perceived to be logical and comprehensive. The analytical frameworks employed are never very different from that described by Andrews (1971). The basic framework suggests that analysis of the external environment (economic, social, demographic, technological, regulatory, political and competitive) leads to an

identification of opportunities and threats that are to be matched with the organization's Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

matrices (Hall, 1978) are often discussed as pertinent to special contexts such as strategy formulation in large multi-business organizations. Such special techniques depend greatly on individual preferences and ingenuity and are not as typical of or intrinsic to synoptic formalism as the analytical process described earlier. It is proposed here that any attempt at integrating the best of synoptic formalism and logical incrementalism would necessarily have to give substantial emphasis to this *analytical dimension*.

King and Cleland (1978) when discussing the design of their synoptic formal approach identify a second key dimension of strategic planning processes—the organizational dimension. However, they do not consider this dimension at length. This is typical of other discussions of synoptic formal approaches, which largely reduce this organizational dimension to a brief dissertation on the roles of the corporate planner, top management and other line managers. In contra-distinction, it appears that roles and interactions of the possible

strengths and weaknesses as determined by studying its past performance and current situation. This matching or co-alignment hopefully recognizes and responds to the values of the decision makers and the priorities of those (employees, stakeholders, creditors, suppliers, immediate community, government) directly affected by the organization's performance.

Apart from this nearly universal fundamental of synoptic formal approaches, techniques such as gap analysis (Ansoff, 1965), issue analysis (King and Cleland, 1978) and growth-share

participants in the strategic planning process are both intrinsic and fundamental to the logical incremental point of view which includes those whom Quinn (1980) refers to as the power-behaviouralists.

That interactions between participants are key to the logical incrementalist approach to design stems from the accepted necessity of integrating incremental changes and the outputs of subsystems so as to avoid a 'piecemeal' (Quinn, 1980) approach. It also stems from the near truism that an appreciation of the importance of group processes, relative power and personal

values involves the recognition that interactions—their nature, form and identities of individuals involved (Guth and Tagiuri, 1965; Delbecq, Van de Ven and Gustafson, 1975)—are

the key to understanding and influencing strategic planning processes. From a logical incremental perspective, therefore, we have a second essential dimension, the *interactive dimension*.

A third dimension which is often overlooked or unstated because it is basic and obvious is the *temporal dimension*. In the context of this paper the temporal dimension takes on added importance, if that is possible, because unless it is explicitly recognized, the integration of the analytical and interactive dimensions of strategic planning processes can neither be

DEFINING THE FRAMEWORK

comprehensive nor entirely meaningful.

The next, logical step is to define a three-dimensional matrix of analytical, interactive and temporal considerations that would, one hopes, guide the design of strategic planning processes. Presumably, as a result of the analytical and interactive dimensions being the prime

reflect the merits and imperatives of both these approaches. However, before this desired end can be reached, the three dimensions need further elaboration, leading to an appropriate, pragmatic definition of cells in the proposed three-dimensional matrix.

The elements of the analytical dimension can be derived from the analytical framework

foci of synoptic formalism and logical incrementalism respectively, the resulting design should

The elements of the analytical dimension can be derived from the analytical framework (Andrews, 1971) described earlier. Analysis of the external environment, competition, past

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

may be added depending on the designer's preferences and the type of organization. The interactive dimension is substantially determined by the organizational context. The identities of individuals and groups involved in the strategic planning process would constitute the elements of this dimension. Beyond identifying the CEO and the corporate planner, if the latter position exists, no truly meaningful generalization of these elements is possible as the

In addition, an integration element is needed to recognize the step, cerebral or individualized though it may be, of integrating the analyses and articulating the strategic plan. Furthermore, depending on the designer's point of view two additional elements may be added, namely, formal consideration of the personal values of the key decision makers and the priorities of the stakeholders in the organization. Finally, elements such as gap analysis and portfolio planning

performance and the internal environment are necessary elements. Each of these elements can be subdivided into as much detail as the designers consider to be appropriate. For instance, in addition to focusing on facets of the economic, social, demographic, technological, political and regulatory aspects of the external environment, analysis can be carried out at several levels of immediacy to the organization (Thomas, 1974). Similarly, analysis of the competition can be segmented into analysis of competitors in terms of inputs (resources), processes (conversion

technology) and outputs (product/market) (Camillus, 1981b).

organizational context is of overwhelming importance. The degree of detail in specifying the elements is a variable with regard to this dimension also. For example, chairpersons of groups or task forces may be specifically identified in addition to the groups or task forces themselves. Or, if a central co-ordinating committee exists, the individual members of the committee may be identified as elements, thus permitting the charting and designing of their interactions.

It must be recognized that the analytical and interactive dimensions are not independent of each other. The degree of detail adopted in identifying the elements of the analytical dimension would obviously influence the degree of detail appropriate for the interactive dimension. Similarly, the detail perceived to be appropriate along the interactive dimension would

influence the choice of elements along the analytical dimension. With regard to the temporal dimension, three aspects are of relevance to strategic planning (Camillus, 1981b). These three aspects are span or duration, frequency and horizon. The

horizon or the length of time into the future that the strategic plan should embrace, relates more

to the output of the process or the content of the strategic plan than to the character of the process itself (Camillus, 1981a). The horizon of strategic plans is dependent on the strategic posture and operating characteristics of the organization. The relationship of the planning horizon to the process of planning is not as significant or clearcut (Camillus and Grant, 1980). The other two aspects of the time dimension are clearly and demonstrably crucial to the integration of the analytical and interactive dimensions, to symbiotic reconciliation of synoptic formalism and logical incrementalism. The span or duration of synoptic exercises has

consistently been a major concern of designers of synoptic formal systems. The trade-off between adequate time to carry out proper analysis on one hand and the problems of maintaining momentum, reducing the likelihood of assumptions becoming obsolete, and minimizing the direct and opportunity cost of executive time has been of pronounced and continuing interest. This concern is necessarily of equal if not greater importance from the

point of view of logical incrementalism, given the need to integrate the outputs of the various subsystems, influence the character of the interactions taking place and permit efficient

The final aspect of the temporal dimension—the frequency or cycle time of activities—is of

great importance in reconciling or integrating the two approaches to planning. The importance

implementation of strategic projects.

exercise derives from the inherent limitations (based on considerations of both cost and The frequency aspect of the temporal dimension also suggests other possibilities for the

of the frequency of repetition of formal planning activities has not been adequately emphasized in the literature. In fact, either explicitly or implicitly, designers of formal systems tend to assume an annual repetition of the strategic planning process (Vancil and Lorange, 1975). On examination this assumption is questionable (Camillus and Grant, 1980). To reexamine the organizational mission, to restate its long-term, enduring objectives, to reshape corporate strategy, to redefine divisional charters, to modify functional policies on an annual basis can in some situations be counter-productive. Creativity, which is the acknowledged essence of strategic planning (Camillus, 1975) will be stifled by the monotony of routine. Reaping the benefit of a strategy often requires lead times of several years. Too frequent a change of strategic direction, too frequent a requirement to scan the environment for strategic discontinuities could lead to a lack of managerial motivation, to an insensitive, lethargic corporate climate. These obvious and significant considerations lead to the logical recommendation that truly synoptic, formal exercises cannot perhaps be effectively carried out more frequently than on a triennial or quinquennial basis (Camillus and Grant, 1980). However, this recommendation in isolation would result in the intervening years being devoid of sensitivity to unexpected developments that require strategic responses. Clearly, a more frequent (than triennial or quinquennial) review of the strategic assumptions on which the synoptically derived formal strategic plan is based recommends itself. Such an annual, limited, focused, essentially incremental exercise is suggested by Bhattacharyya (1976). The need for such an incremental

creativity) of synoptic formal exercises. synergistic integration of synoptic formalism and logical incrementalism. The intervening years between the triennial or quinquennial synoptic, formal exercises both require and are highly supportive of the exercise of logical incrementalism. Strategic issues identified during the synoptic exercise would actuate analysis by appropriate subsystems such as the diversification subsystem. The intervening years would provide the time for efficiency sequencing and scheduling the implementation of strategic projects. Zones of indifference (Wrapp, 1967) can be identified, manipulated and created. Shifts in relative power mandated by desired strategic

changes can be affected through mechanisms such as organizational structure. In short, the strategic subsystems envisioned by Quinn (1980) come into their own, catering to the reality of bounded rationality in a manner that would appeal to advocates of synoptic formalism and with the advantage, desired by both schools of thought, of a comprehensive, synoptically developed understanding of the organization's strategic context. The social processes and power plays' that have legitimately concerned the logical incrementalists can now be responded to with greater explicitness, ingenuity and effectiveness because of the consistency over time of

# CONCLUSION

organizational strategy and the possibility of effecting gradual strategic change.

the primary concerns, respectively, of the synoptic and incremental schools. The time-span aspect of the temporal dimension is of significance to both schools, and the frequency aspect of the temporal dimension highlights the need for and suggests the way to integrating the two approaches. A stylized representation of this matrix is provided in Figure 1.

We now have a three-dimensional matrix of elements determining the design of strategic planning processes. The analytical and interactive dimensions influence each other and reflect

The matrix in figure 1 is a very simple version of the framework, with a minimum of elements

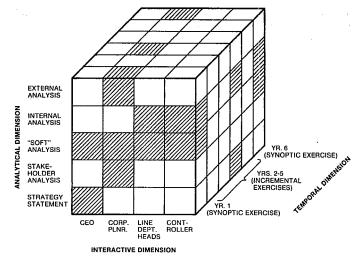


Figure 1. The proposed framework—a multi-year perspective

along the analytical and interactive dimensions because of the choice of units of a year along the temporal dimension. This rather aggregate representation suggests the sequencing and frequency of the recommended synoptic and incremental approaches. To actually design a process, the units along the temporal dimension would have to be scaled up to a week or month so that the detailed analyses and interaction needed can be defined.

The attempt to develop a conceptual framework for integrating two such complex and apparently different approaches to strategic planning is admittedly ambitious. The further assertion that this framework has obvious, immediate and wide-ranging operational significance might appear overly optimistic. However, the need to reconcile and derive the best of synoptic formalism and logical incrementalism is so pressing and offers such immense potential for improving strategic management that such *hubris* is hopefully understandable and justifiable.

## REFERENCES

Andrews, K. R. The Concept of Corporate Strategy, Dow Jones-Irwin, Homewood, IL, 1971.

Ansoff, H. I. Corporate Strategy: An Analytic Approach to Business Policy for Growth and Expansion, McGraw-Hill, New York, NY, 1965.

Ansoff, H. I. 'The state of practice in planning systems', Sloan Management Review, XVIII, 1977, pp. 1-24.

Berg, N. and R. A. Pitts. 'Strategic management: the multi-business corporation', in Schendel, D. E. and C. W. Hofer (eds). Strategic Management: A New View of Business Policy and Planning, Little, Brown, Boston, 1979, pp. 339-348.

Bhattacharyya, S. K. 'A strategic framework for profit planning: concepts, systems and structure', Vikalpa, I, January 1976, pp. 1-19.

Bower, J. L. 'Strategy as a problem solving theory of business planning', Intercollegiate Clearing

House Report No. BP894, Boston, MA, 1967.
Braybrooke, D. and C. E. Lindblom. A Strategy of Decision: Policy Evaluation as a Social Process, Free Press, New York, NY, 1963.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Guth, W. D. and R. Tagiuri. 'Personal values and corporate strategy', Harvard Business Review, XLIII, (5), 1965, pp. 123–132. Hall, W. K. 'SBUs: hot new topic in the management of diversification', Business Horizons, XXI, February 1978, pp. 17-25. Hedberg, B. L. T., P. C. Nystrom, and W. H. Starbuck, 'Camping on seesaws; prescriptions for a selfdesigning organization', Administrative Science Quarterly, XXVI, March 1976, pp. 41-65. Janis, I. L. and L. Mann. Decision Making: A Psychological Analysis of Conflict, Choice and Commitment, Free Press, New York, NY, 1977.

Camillus, J. C. 'Evaluating the benefits of formal planning systems', Long Range Planning, III, June

Camillus, J. C. 'Strategic management of capital expenditure: a systemic contingent framework',

Camillus, J. C. 'Corporate strategy and executive action: transition stages and linkage dimensions',

Camillus, J. C. 'Strategic planning systems for business units: toward a systemic framework', Decision,

Camillus, J. C. and J. H. Grant. 'Operational planning: the integration of programming and budgeting',

Delbecq, A., A. Van de Ven, and D. Gustafson. Group Techniques for Program Planning, Scott,

Grant, J. H. and W. R. King. 'Strategy formulation: analytical models', in Schendel, D. E. and C. W. Hofer (eds). Strategic Management: A New View of Business Policy and Planning, Little, Brown,

Academy of Management Proceedings, 1980, pp. 26-30.

Academy of Management Review, VI, April 1981a, pp. 253-259.

Academy of Management Review, V, July 1980, pp. 369-379.

1975, pp. 33-40.

VIII, July 1981b, pp. 157-174.

Foresman, Glenview, IL, 1975.

Boston, pp. 104–122.

1974, pp. 27-38.

State Planning Agencies, Washington, DC, 1980.

- King, W. R. and D. I. Cleland, Strategic Planning and Policy, Van Nostrand Reinhold, New York, NY, 1978. Lindblom, C. E. 'The science of "muddling through"', Public Administration Review, XIX, Spring 1959, pp. 79-88. Lorange, P. Corporate Planning: An Executive Viewpoint, Prentice-Hall, Englewood Cliffs, NJ, 1980.
- Lorange, P. and R. F. Vancil. Strategic Planning Systems, Prentice-Hall, Englewood Cliffs, NJ, 1977. MacMillan, I. C. Strategy Formulation: Political Concepts, West Publishing, St. Paul, MN, 1978. Prahalad, C. K. 'Strategic choices in diversified MNCs', Harvard Business Review, LIV, July-August,
- 1976, pp. 67-78. Ouinn, J. B. Strategies for Change: Logical Incrementalism, Irwin, Homewood, IL, 1980.
- Schendel, D. E. and C. W. Hofer (eds). Strategic Management, etc.
- Simon, H. A. Administrative Behavior, Macmillan, New York, NY, 1957.
- Simon, H. A. The New Science of Management Decision (Revised Edition), Prentice-Hall, Englewood
  - Cliffs, NJ, 1977.
- Steiner, G. A. Top Management Planning, Macmillan, New York, NY, 1969. Steiner, G. A. Strategic Planning, The Free Press, New York, NY, 1979. Summer, C. E. Strategic Behavior in Business and Government, Little, Brown and Company, Boston,
- MA, 1980. Thomas, P. S. 'Environmental analysis for corporate planning', Business Horizons, XVIII, October
- Vancil, R. F. and P. Lorange. 'Strategic planning in diversified companies', Harvard Business Review, LIII, January-February 1975, pp. 81-90. Walter, S. M. (Editor). Proceedings of the White House Conference on Strategic Planning, Council of
- Wrapp, H. E. 'Good managers don't make policy decisions', Harvard Business Review, XLV, September-October 1967, pp. 91-99.
  - Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.