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Strategic Implementation: Five Approaches to an Elusive Phenomenon

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Summary
The traditional textbook approach to strategy implementation was to treat 'implementation' as an activity following 'formulation'. Usually, the topic was treated as a question of organization design, where systems and structures were manipulated in concert with strategic goals. More recent views treat implementation either as an issue of gaining prior group commitment through coalitional decision-making, or as a question of total organizational involvement through a strong corporate culture. This paper reviews the evolution of these approaches, developing four models to characterize them, and suggests a fifth one, with strategy emerging in an almost-implemented form from within the firm.

In these days of international inflation, resource depletion and global interdependence, the strategic manager must either find or create increasingly sophisticated tools and models to guide his enterprise. Content models of strategy developed over the last decade, which usually have either strong economic theory foundations or empirical grounding, are providing much of this sophistication (see, for example, Harrigan, 1980; Porter, 1980; Rumelt, 1974; Schendel and Patton, 1978; Schoeffler, Buzzell and Heany, 1974). Process models, on the other hand, have not advanced too far beyond common-sense formulations or the traditional business policy or strategic planning approaches developed at various business schools (Andrews, 1971; Ansoff, 1965; Drucker, 1954).

This paper examines five process approaches used to advance the art of strategy implementation. The first bears close resemblance to the traditional subject matter of business policy and/or strategic planning courses. It addresses strategic 'position' only, and essentially guides the CEO in charting his firm's destiny. Here, the CEO uses economic and competitive analyses to plan resource allocations in the achievement of explicit objectives. We call this the *Commander Model*, since it contains a strong normative bias toward centralized direction. The second approach deals explicitly with strategy implementation, and emphasizes how organizational structure, incentive compensation, control systems and so forth can be used to facilitate the execution of a strategy. Since it usually concerns the adoption of a new strategy, we call this approach the *Change Model*. The third approach concentrates on group decision-making at senior levels, and involves top management in the formulation process to secure commitment. Since it involves the consideration of multiple inputs to a group decision in which strategy emerges as a negotiated outcome, we call this approach the *Collaborative Model*.

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The fourth approach seeks to implement strategy through the infusion of a corporate culture throughout the organization. Here, lower levels participate in the design of means to perpetuate strategic direction, and are inculcated with a set of values which influence work-related behaviour. We call this the *Cultural Model*. The final approach examines strategy issues using the principal/agent model and proposes an alternative to the traditional division of the firm into 'strategy developers' and 'strategy implementers'. This approach draws on managers' natural inclinations to want to develop new opportunities as they see them in the course of their day-to-day management. Since this involves 'growing' strategy from within the firm, we call this approach the *Crescive Model*.

For each approach, we open with a scenario to make more vivid the nature of the strategic process as conceived by that approach. Then, we describe the model used to guide strategy development. Finally, we evaluate the approaches, commenting on strengths and weaknesses in general, as well as on contextual factors which make each more or less effective.

The fifth section, on the Crescive Model, deviates slightly from this format because the model still seems to be in the formative stages. We proceed here by sketching out a model of management behaviour relevant to strategy implementation, and then drawing some conclusions which may serve as a guide to management behaviour.

Why these five approaches in particular? First, we think they represent a trend toward increasing sophistication in thinking about implementation: each approach builds on the preceding one and adds 'tools' to the strategic manager's repertoire. Secondly, we see a rough chronological trend: the Commander Model was the first solution offered to the general management planning problem; the Change Model followed, in response to the perceived failure of strategic planning in some firms; the collaborate and Cultural Models proceeded to enhance implementation by broadening the base of participation. Now the Crescive Model, as we use the term, is taking shape as managers of diversified and multinational firms recognize the limitations of more or less centralized control and attempt to harness and exploit the initiatives taken at local levels.

With the positing of the Crescive Model, we take a somewhat divergent view of how strategic management is—or ought to be—progressing in American industry. Recent articles by management consultants (Bales, 1977; Gluck, Kaufman and Walleck, 1980) and academics (Haspeslaugh, 1982) have chronicled—and apparently encouraged—a recentralization of strategy-making at headquarters. We think, at least for some firms, that this might be a mistake.

For the purpose of presentation, we have reduced the various approaches to their essential elements. This may strike some readers as caricature; the Commander Model, in particular, can be applied with much more subtlety than we have indicated here. Our intent

Table 1. Five models in brief

Model	The CEO's strategic question	CEO's role
I. Commander	'How do I formulate the optimum strategy?'	Rational actor
II. Change	'I have a strategy in mind; now how do I implement it?'	Architect
III. Collaborative	'How do I involve top management to get commitment to strategies from the start?'	Co-ordinator
IV. Cultural	'How do I involve the whole organization in implementation?'	Coach
V. Crescive	'How do I encourage managers to come forward as champions of sound strategies?'	Premise-setter and judge

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in this paper is not to denigrate any approach or group of practitioners. Rather, we hope that by exaggerating the differences between approaches, we can better identify and analyse the assumptions on which they rest. To highlight the differences in abbreviated form, Table 1 summarizes the five models in terms of the strategic management question each addresses and the CEO's role in each. Each of these questions and roles will take on clearer meaning as we proceed.

THE COMMANDER MODEL

The scenario

You are the chief executive officer of a large industrial corporation. After 6 months of study, your planning group (or a consulting team) has handed you a report detailing which businesses the firm should be in and how it should compete in each area. You have read the report and it supports your own calculations. Now you call all your top managers into a conference room, present the strategy, tell them to implement it, and sit back to await the results.

The model

The Commander Model addresses the traditional strategic management question of 'How can I, as a general manager, develop a strategy for my business which will guide my day-to-day decisions in support of my longer-term objectives?'

In this model, the role of the CEO is that of a 'Rational Actor' issuing directives from the seat of power. The model assumes that an exhaustive analysis can be undertaken *before* taking action, and requires that the CEO holds a considerable amount of power and has access to complete information. It relies almost exclusively on economic rationality, and considers political issues only as they involve parties outside the firm. Generally, it fails to consider the implementability of plans, either as a binary variable ('implementable' or 'not implementable') or as an aspect of the strategy with a cost in time and money associated with it.

The Commander Model encompasses two rubrics, the systems model and the incremental approach (Wheelwright, 1973). In the systems model, one first identifies the objectives of the organization, then generates courses of action which might meet the objectives, then evaluates them on grounds of economic efficiency and, finally, chooses one for execution. The model has been assailed on the grounds that, under conditions of bounded rationality, the planner cannot consider all options, but this has not hindered its effective use. In the second, incremental, approach, one identifies the existing strategy, evaluates threats and opportunities facing the firm, and plans modifications to the current strategy in order to meet the changed environmental conditions. Although these two approaches clearly differ, both in their orientation toward magnitude of change and their scope of analysis, they are both commander models in the sense that they assume a purposive general manager directing the firm toward objectives defined at the apex of the organization.

In its most identifiable form, the Commander Model employs tools that are analytic (usually economic) in nature.[1] It is in the context of this model that one would see the use of experience curves, growth/share matrices, PIMS studies, and industry and competitive analyses.

[1] At least as it is taught in MBA programmes and sold by consulting firms. Many strategies, of course, are conceived intuitively, as in the case of entrepreneur-run organizations (e.g. Polaroid during Ed Land's era), and implementation is controlled from the top in a step-by-step fashion (Quinn, 1978).

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Implications

In general, the commander model will probably provide the executive with a sense of direction for his firm that will both help him make difficult day-to-day decisions and will reduce uncertainty. However, this model places strong demands on the organization, four of which are listed here as possible limitations: (1) the Commander Model works best under conditions where the CEO wields a great deal of power and can command implementation, or where the proposed strategy poses little threat to organizational members, so implementation can be achieved easily; (2) the model requires that accurate and timely information must be available to the strategists or that environmental change be slow enough to allow for full information to be assimilated; (3) the model requires that the strategist be insulated from personal biases and political influences which may impinge on the content of the plan; and (4) the model splits the firm into thinkers and doers. Each of these points is described in more detail below.

1. *The Commander Model requires easy implementation*

Since the model does not consider implementation problems explicitly, we hypothesize that it will work best under the following conditions.

(a) The objective function of the formulator should match that of the managers who must implement the strategy.
(b) Systems currently in operation in the company must not impede the behaviour called for by the strategy. For example, a firm which historically rewards managers for growth may have difficulty implementing a harvest strategy.
(c) Where top management enjoys a great deal of centralized power, top-down strategies are more likely to succeed. Such power could come from an effective authoritarian management style, from deep personal loyalty to the CEO, or from having good access to formal and informal information on key people in the firm.
(d) The Commander Model is more likely to succeed when it is not threatening, such as when the strategy calls for only slight change and does not require layoffs.
(e) Given its centralized information requirements, the Commander Model will probably work best for firms in stable environments that have a low degree of diversity, or at the SBU level of diversified firms (where information has fewer filters to pass through).
(f) The Commander Model will be more effective if the organization is in a strong competitive position and has plenty of slack. To the extent that strategies differ in the amount of resources required for implementation, the greater the slack in the organization, the greater the likelihood that a given strategy will be implementable.

2. *The Commander Model requires good information*

The value of a strategy depends on the ability of the strategists to obtain complete, accurate information about the firm's internal capabilities and its position in the environment. Although the strategy is developed by people near the top of the organization, much of this information enters the firm at lower levels through, for example, salesmen, purchasing agents and factory foremen. Thus, the commander model requires that this information be collected and communicated upward, efficiently and accurately.

This presents two potential limitations. First, in a fast-changing environment, the

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information submitted to the strategists may be obsolete by the time it reaches them. Under such circumstances, decision-making must be done by the people closer to the information sources. Secondly, even when the rate of change allows information to be assembled and transmitted upward in a meaningful time frame, the people who provide the information may feel strong incentives to conceal or mislead, if the outcome of the decision process might affect them.

3. *The Commander Model requires objective planners*
In decentralized organizations, where division managers formulate plans and pass them upward, the planner no longer stands aloof from political turmoil and economic self-interest. This problem differs from the one just described; there we were concerned with biasing of information provided to central planners, whereas here we are concerned with bias in the process which transforms data into plans. The plans generated by division managers will probably be optimal from the point of view of their divisions (or the managers themselves, if incentive compensation is involved), but not from the standpoint of the corporation as a whole. Controlling this problem requires a sizeable planning staff at the corporate level, which can provide the time and expertise necessary to give divisional plans the close scrutiny they require.

4. *The Commander Model splits the firm into thinkers and doers*
The division of the organization into thinkers and doers can create motivational problems. As some studies have pointed out, people on the firing line ('doers') tend to withhold alternatives which they think have little chance of acceptance (Carter, 1971). If the general manager creates the belief that the only acceptable strategies are those developed by himself or by his planning staff, he may find himself faced with an extremely unmotivated, uninnovative group of employees. Indeed, one premise of the model, that strategies are formulated at the top of the organization and forced downward, is inconsistent with observed behaviour in many companies. As Bower (1970), Carter (1971) and Burgelman (1983) have observed, strategy often results from individuals taking the initiative in identifying and championing opportunities.

Why the approach persists
In the light of the limitations of the Commander Model in its pure form, why is it still prevalent in business schools and among consultants? Five factors account for its popularity. First, it does offer a valuable perspective to the chief executive, although its value may be limited by the implementability of the strategy, by information problems, and by the incentives operating on managers at different levels in the organization. Secondly, by dividing the management task into 'planning' and 'doing', the general manager reduces the number of inputs he must process simultaneously. Thirdly, the commander approach places the strategic planner in a position to influence the firm's density, an opportunity which, no doubt, appeals to many consultants and freshly minted MBAs. Fourthly, it fits the MBAs predisposition toward dealing with the quantitative and objective elements of a situation, rather than with more subjective and behavioural considerations. Finally, the separation between the planner/manager as a thinker and everyone else as a doer fits the view of the boss as an all-powerful hero, shaping the destiny of thousands with his decisions. This somewhat macho view naturally appeals to many aspiring managers.

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The scenario

After receiving your planning group's strategic recommendations, you have reviewed them and have made your strategy decisions. Now, on your own or with the aid of a different kind of expert, you plan modifications to the organization which will increase the chance of successful adoption of the plan. Here, you plan a new organizational structure, personnel changes, new information systems, and revisions to the compensation scheme. You may even consider changing the boundaries of the firm through merger or acquisition.

The model

The Change Model offers an extension to the commander model by addressing the question 'I have a strategy—now how do I get my organization to implement it?' In this model, the CEO applies behavioural science techniques to manipulate his organization into compliance with his strategic plan. The role of the CEO is that of an architect, designing administrative systems to orchestrate implementation and push his inertia-ridden economic unit toward goal achievement.

This approach starts where the Commander Model ends: with implementation. It assumes that the economic tools described above for strategy formulation have been mastered and adds to the tool kit three sets of behavioural science techniques to increase the probability of successful implementation: (1) the use of structure and staffing to convey vividly the firm's new priorities and focus attention on the desired areas; (2) the alteration of systems used for planning, performance measurement, and incentive compensation; and (3) the use of cultural adaptation techniques to introduce system-wide change.

Structure and staffing

Perhaps the most obvious tool for strategy implementation is for management to alter the structure of the organization and to add, remove or shift personnel in order to lead the firm in the desired direction. This has been the traditional approach espoused by most business policy textbooks (see, for example, Andrews, 1971; Galbraith and Nathanson, 1978; Schendel and Hofer, 1979; Uyterhoeven, Ackerman and Rosenblum, 1977). Generally, the structure of the organization should denote the skill set most critical to attaining the strategy: for example, a strategy calling for world-wide co-operation of manufacturing in order to capture cost efficiencies demands a functional organization for production, whereas a strategy calling for marketing of commodity products (e.g. Procter and Gamble) calls for a product-oriented organization.

Planning systems, performance measurements and incentive compensation

A variety of account and control tools support administrative systems for implementing strategy.

Planning systems governing capital and operating budgets can be adjusted to elicit desired behaviours. For example, if the firm's strategy calls for investing in certain businesses and harvesting others, or for repatriating profits in one national unit to fund others, these goals should figure prominently in the capital budgeting system which approves every project with a return above an arbitrary hurdle rate. Similarly, the process for preparation and approval of annual operating budgets can be adjusted to support the kind of resource allocation decisions called for in the strategy. In addition to reviewing the planning systems

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themselves, the would-be implementer must also consider the effect of financial standards, such as cost allocations and transfer prices, which influence decision-making throughout the firm.

The *information systems* used by the firm to measure performance should translate the strategy into meaningful short-term milestones, so that the progress according to the strategy can be monitored. The power of such a system is enhanced considerably when integrated with the following implementation mechanism.

To the extent that the desired behaviour can be translated into clear-cut numerical terms, and the outcome is sufficiently free of uncontrollable risk as to make it productive to impose this risk on the manager, then the *incentive compensation* scheme can be changed to encourage the desired behaviour. At a minimum, the general manager must ensure that current compensation arrangements do not create an incentive plan in opposition to the substance of the strategic plan.

Cultural adaptation

To implement strategy more effectively, the manager can rely on techniques described in the community development literature in order to introduce change in the organization (Ahrensburg and Niehoff, 1971). These techniques include such fundamentals as (a) use demonstrations, (b) start with clearly-perceived needs and (c) enlist the support of high-credibility presenters. Related change techniques have emerged through studies of corporate culture (Gluck, 1981; Pascale and Athos, 1981; Peters, 1978). This latter research identifies ways in which the executive's actions have strong symbolic force in conveying to employees a sense of desired behaviour.

Implications

With a set of powerful implementation tools at his or her disposal, the executive using the Change Model can carry out more difficult plans in a greater variety of organizations than would be possible without these tools. Thus, in a very practical sense, this approach will be more effective than a pure commander model in many organizations; that is, the Command and Change Models are partners in the strategy formulation–implementation cycle.

The cast of characters in this model differs only slightly from those participating in the Commander approach. Now the strategist, whether general manager or staff specialist, needs political skills in addition to the planning tools described in the first section. As before, the team of planner and executive must jointly possess all knowledge needed to plan, and all the power needed to implement the strategy. Now, however, the executive does not merely pass the strategy on to his subordinates; he stays actively involved through the implementation phase and probably reveals the strategy gradually, taking advantage of opportune moments (Quinn, 1977, 1978; Wrapp, 1967).

However, tacking 'implementation' onto 'strategy' does not solve most of the problems encountered with the first model: the Change Model does not deal with problems of obtaining accurate information; it does not deal with situations where the planner faces disincentives against objectivity; and, since it still calls for imposing the strategy in top-down fashion, it does not resolve the motivational problems created by the first approach.

The Change Model raises a theoretical possibility of a new kind of problem. By manipulating the systems and structures of the organizations in support of a particular strategy, the general manager may be trading off important strategic flexibility. Some of these systems, particularly incentive compensation, take a long time to design and install; once installed, they may take time to become effective. Should an unforeseen change in the

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environment require a redirection of the strategy, it may be very difficult to change the firm's course, since all the 'levers' controlling the firm have been set firmly in support of the now-obsolete game plan. Thus, where environmental uncertainty is high, it may prove more effective in the long-run to refrain from using some of the tools described above. For example, many high technology firms, which rely on rapid development and introduction of a continuous stream of technological innovation, avoid imposing bureaucratic administrative systems which would blunt their ability to create strategic change.

THE COLLABORATIVE MODEL

The scenario

With key executives and division managers, you embark on a week-long planning retreat. Sitting around an oval table, armed with strategic analyses of his own function or business portfolio, each participant presents his own ideas of where the firm should head. Extensive discussions follow, until the group reaches a consensus around the firm's longer-range mission and near-term strategy. Upon returning to their respective offices, each participant charges ahead in the agreed-upon direction.

The model

The Collaborative Model extends strategic decision-making to the organization's dominant coalition in answer to the question, 'How can I get my top management team to help develop and commit to a good set of goals and strategies?'

In this model, the CEO employs group dynamics and 'brainstorming' techniques to get managers with differing points of view to provide their inputs to the strategic process. Given that effective top management teams will differ in their goal structures (Bourgeois, 1980), as well as their perceptions of the environment (Lawrence and Lorsch, 1967), the CEO will want to extract whatever 'group wisdom' is inherent in these multiple perspectives. The role of the CEO is that of co-ordinator, structuring the interactions among the decision-makers in such a way that all good ideas are entertained. In a sense, a football team huddle is representative, where relevant strategic information from various positions is factored into each round of decision-making.

The structuring of group interactions can take a variety of forms, most of which are task- (as opposed to affect-) oriented. For example, Arther D. Little engages its management team participants in a Q-sort method of gaining team consensus on which generic strategies 'fit' their particular industry situation. Mitroff and Emshoff (1979) put their participants through a structured 'dialectical inquiry' process which forces them to surface the basic assumptions upon which various proposed strategic alternatives are based. A third variant of the collaborative model involves *teaching* Commander-type analytical tools to the top management team, as done by some academic consultants. (This contrasts with providing management with the analytical *output*, such as a report, which many strategic management consultants do.)

A number of corporations use this approach. General Motors formed 'business teams' in 1980 which consisted of managers from different functional areas; the role of the team was

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simply to bring different points of view on whatever strategic—usually product-focused—problem was identified. The CEO of a wholly-owned Exxon subsidiary informed us that his job was not to make and implement strategy, but to assemble a team of competent managers—most more competent than he in their respective functional fields—which could, jointly, collaborate in the formation of strategies. When Ed Carlson took over ailing United Airlines in 1970, he set out initially to decentralize decision-making as much as possible. In order to achieve this, he loaded his 12 senior executives and spouses onto a jet in early 1971 and flew them to Los Angeles for a weekend of low-key meetings. These loosely-structured meetings involved hammering out the parameters of the corporation's strategy and structure which would persist for almost a decade (Pascale and Athos, 1981).

Implications

The Collaborative Model overcomes two key limitations inherent in the previous two: by capturing information carried by executives closer to the front lines of operations and by engaging several brains at once, it helps overcome both the information accuracy and cognitive limits of the Commander Model. To the extent that participation breeds commitment among the deciders, it can deal with the motivational problems encountered in both the Commander and Change Models, and, thereby, improve the probability of successful implementation.

However, what the Collaborative Model gains in team commitment may come at the expense of economic rationality. In this model, strategy is a negotiated outcome among players with different points of view and, possibly, different goals. The 'ideal' strategy indicated by Commander-type tools, and the 'ideal' administrative system implied in the Change Model may be economically and technically rational, but may not be politically feasible.

The evaluative criterion for this model would be team consensus achieved with minimal 'gaming' and acrimony. Conventional wisdom would hold goal consensus as the key guarantor, although recent research would indicate that consesus on specific strategies is more critical for performance (Bourgeois, 1980). Although the previous two models may be most efficient in simple and stable (and, therefore, more easily understood) environments, the benefits of the Collaborative Model probably start to accrue in more complex and, perhaps, less stable environments, where the chief executive or division manager is unable to perceive, assimilate and comprehend the totality of his organization's activities.

This model does not necessarily overcome the gaming or fiefdom-building tendencies which often follow from conditions of resource scarcity and information assymetry. In fact, the group decision process itself, especially as it relies directly on the participants for information about their respective responsibility areas, may indeed foster such dysfunctional behaviour. Or, in the opposite extreme, this senior-dominated decision-making could follow the pattern described by Dye's 'elite theory' (1975), where right-thinking but insulated power elitists screen out discordant information in their efforts to achieve and maintain consensus and harmony.

A more fundamental criticism of the Collaborative Model is that it is not 'real' collective decision-making from an organizational standpoint, because the managers—the organizational elite—cannot or will not give up centralized control. In effect, this model preserves the artificial wall separating thinkers and doers and fails to draw upon the full human potential within and throughout the organization. It is the plumbing of this potential that forms the basis of our fourth model.

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The scenario

Having formulated both a competitive strategy and a long-term 'vision' for your company (either alone or with the collaboration of your senior managers), you proceed to inculcate your entire organization with this vision by molding the organization's culture in such a way that all *organization members participate in making decisions that will perpetuate the vision. You draft and publish a company creed, commission the composing of a company song, and create and use other symbols which, when absorbed by both workers and managers, will ensure singleness of purpose and unity in action.*

The model

The cultural model takes the participative elements of the collaborative model to lower levels in the organization as an answer to the strategic management question 'How can I get my whole organization committed to our goals and strategies?'

In this model, the CEO guides his organization by communicating and instilling his vision of the overarching mission for the firm, and then allowing each individual to participate in designing his or her work procedures in concert with that mission. So, once the game plan is set, the CEO plays the role of 'coach' in giving general direction, but encourages individual decision-making to determine the operating details of executing the plan.

This model should strike a familiar chord in the minds of readers exposed to the plethora of recent 'Japanese management' articles appearing in both popular and academic publications (see, for example, the *Fortune* series on 'Working Smarter, Burck, 1981a, 1981b; Main, 1981a, 1981b). In effect, the Cultural Model represents the latest wave of management techniques promulgated to (and, in many cases, enthusiastically adopted by) American managers seeking the panacea to their recent economic woes in the face of successful Japanese competition.

To a large extent, proponents of the Cultural Model have modernized some of the human relations approaches of the 1950s (see, for example, Likert, 1961), or the 'human resources' entreaties of the 1960s (Miles, 1975) and put them in new bottles for the 1980s. But, more sophisticated authors have improved upon the earlier approaches in at least three ways: (1) they employ more subtle theories, in the sense that the variables they manipulate go beyond the mere sharing of work-related decision-making; their new variables include such intangibles as symbols and leader behaviour patterns (Peters, 1978), organizational clans (Ouchi and Price, 1978), and 'super-ordinate goals' and 'style' (Waterman *et al*., 1980); (2) these writers focus on the entire organization—a significantly larger unit of analysis than the face-to-face work group of the human relations era; and (3) they argue that corporate culture should serve as the handmaiden to corporate strategy, rather than to proselytize 'power equalization' and the like for its own sake.

Some of the tools are more concrete than the variables listed above, to be sure. Ouchi's 'Type Z' organization engages in readily identifiable personnel practices, such as long-term employment, slow evaluation and promotion of employees, less specialized career paths, and consensus decision-making (Ouchi, 1981). Or, in the application of the 'style' variable of their '7-S' model (Waterman *et al*., 1980), McKinsey and Co. cite the example of the prospecting crews searching for mineral deposits in New Zealand. Although they all used

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identical geological methods, the most successful crew was the one with the boss whose style was to make frequent visits in his pick-up truck to the men in the field (Waterman, personal communication).

The Cultural Model is the first, in our chronicling of strategic management thinking, to attempt to break down the cleavage between thinkers and doers. As Burck points out in the first of the *Fortune* series:

> By whatever name, ... this kind of effort is most broadly described as the process of expanding the responsibility and influence of rank-and-file employees. It assumes that people want to work together in common purpose, and it challenges the sharp distinction, inherent in classical Western industrial organization, between the actual work ... and the planning and co-ordination of that work. Today's employees, it holds, are able to participate more fully in management decisions at all levels, and the organization that does not let them ... wastes valuable intelligence (1981a:68–70).

Examples of the successful application of this model are numerous. Ouchi's work relies on Hewlett-Packard as his main empirical source, where the 'HP way' encourages product innovation at every level and at every bench (Ouchi, 1981). Pascale and Athos (1981) provide a book-length case history of Matsushita, which, in the image of IBM, starts each day at 8:00 a.m. with 87,000 employees singing the company song and reciting its code of values. Both Ouchi and Pascale and Athos give the U.S. Army as an example of an effective value-inculcating organization, sometimes holding it up as a standard:

> ... Matsushita's seemingly doctrinaire approach is not unlike that practiced by several outstanding firms in the U.S. ... 'At Procter and Gamble, Sears, and IBM, they make the system work by running it something like the Army. If you get out of step, they come after you. They hire young people at twenty-one who are open and malleable and they only start them at the bottom ... Over a period of time, those who stay come to be a part of a separate culture in which shared understandings act as a great facilitator in getting business done' (Pascale and Athos, 1981:52–53).

Implications

It would appear that with an organizational ethos in place, the chief executive's implementation task is 90 per cent done. With a cadre of committed managers and workers, the organization more or less 'carries itself' through cycles of (possibly, as in HP) innovation of new products and processes at the work bench, followed by assimilation and adaptation at the lower levels. Much like a basketball team, there is a continuous mutual adjustment among and between organizational units as the 'play' evolves around every member's moves. This activity all takes place in the pursuit of some overriding vision established by senior management.

The most visible 'cost' of this sytem also yields its primary strength: the concensus decision-making and other culture-inculcating activities consume enormous amounts of time. But the pay-off—at least in the case of Westinghouse's implementation of Ouchi's approach—is both speedy execution and reduced gaming. As William Coates, executive V.P. of Westinghouse's construction group, describes it:

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> Perhaps the most important decision by the managers' council [was to] allocate capital among the units. In the past, the managers would never have met to discuss allocations. Coates or his predecessors would have received requests for funds, assumed they were inflated, lopped a bit off each, and told the managers what they were getting. This time, after listening to each other's problems and prospects in the council meeting, the managers abandoned the normal stance of defending their own turf. They decided certain units should be pushed hard and others cut back—in one case, almost to zero. Some of the managers voluntarily gave up allocations Coates thinks they would have fought for had he tried to make the cuts. 'They helped me do a fantastic job that I could never have done myself', he says. 'If I had ordered them to do what they themselves decided to do, I would have had an insurrection on my hands' (Main, 1981a:88).

and,

> Although even the most enthusiastic converts agree that participative-management meetings eat up hours, Coates says lost time is recovered later. 'We spend a lot of time trying to get a consensus, but once you get it, the implementation is instantaneous. We don't have to fight any negative feelings' (Main, 1981a:93).

Based on our assessment of the nature of the companies generally held up as exemplars of this approach to strategic management, we have reached some tentative conclusions about the organizational characteristics for which it is most suited: the Cultural Model seems to work when power is decentralized, where there are shared goals between the organization and its participants, and where the organization is stable and growing.

This last point may be key: cultural models work best where there is sufficient organizational slack to absorb the cost of installing and maintaining them. Consider some of the exemplar firms: HP, IBM, Matsushita and Intel. These tend to be high-growth firms. As Main describes Intel's experience, 'To lessen the threat of change, Intel promised not to fire any permanent employee whose job was eliminated. The company's phenomenal sales growth, 29.3 per cent in 1980, helps absorb everyone who wants to stay' (1981b:54).

The cultural model has several limitations. For one, it assumes informed and intelligent people (note that most of the examples are firms in high technology industries). Secondly, the presence of a powerful culture that seems to be 'working', in the sense that consistency of decisions at all levels is achieved, may lull the organization and allow it to drift and lose focus. For example, when one division of Hewlett-Packard introduced the HP-3000 computer, it discovered too late that the machine it would supplant (made by a separate divison) was not much inferior and used a different operating system. (For the 3000 to succeed, customers would have to invest in learning new software without a compensatory improvement in computing capability.) Thus, the culture of innovating at the local level resulted in a costly mistake.

In addition to the costs in time consumption, the initial installation of a cultural model in a firm which has not previously employed one, will, as in any organizational change, exact its toll in human costs. As Jeremy Main points out in his Intel example, if they had it to do over again, they 'would go slower and make managers pay more attention to the personal stress and frustration created ... Many employees were enthusiastic ... but others were upset and, for a while, turnover was high' (1981b:58).

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Other limitations are enumerated by Ouchi himself in his book, *Theory Z*. Organizations with powerfully strong cultures (as in 'Type Z' companies) suffer from xenophobia, they resist deviance, retard attempts to change and tend to foster homogeneity and inbreeding. *Xenophobia* can be a problem because it makes the hiring of outsiders difficult at top levels—others will not accept the infusion of alien blood. (It took Archie McGill almost 5 years, since his departure from IBM, to begin to see results in efforts to change the Bell System's culture in a marketing direction.)

The *resistance of deviance* within the ranks can be a problem when true innovation is critical. A strong culture, the shared values that hold the organization together through a consistency of beliefs, will reject inconsistency. To handle this, companies such as IBM, Xerox and GM will segregate their research units and those with new product ideas, sometimes placing them in physical locations far enough away to shield them from the corporation's culture. As IBM's president, John Opel, has pointed out, IBM's sheer size (341,279 employees) can hamper flexibility and stifle entrepreneurial creativity. To prevent this, he says, 'we isolate little pieces (of the company), when we have a creative idea, to protect them. We have a bureaucratic way of protecting them from the bureaucracy' (*Business Week*, 1981:90).

Homogeneity can create the conditions which encourage deviants to leave for more accepting pastures, robbing the firm of its potentially innovative talent. In addition, it may prevent the firm from competing successfully in the multinational arena, since the strong home-bred culture may be extremely difficult to duplicate in foreign environments.

The Cultural Model, at least as advocated by its major proponents, has come under some rather strong criticism recently. To some, it smacks of *1984*-style indoctrination, almost having a brainwashing flavour to it. Witness Pascale and Athos's description of Matsushita's method:

> These values are inculcated through a long apprenticeship across one's career. The newly hired are exposed to them continually. As a member of any working group, each person is asked at least once every other month to give a ten-minute talk to his group on the firm's values and its relationship to society. It is said that nothing is so powerful in persuading oneself as having to persuade others (1981:50).

But the model's most caustic critic is Robert Reich, who likens the approach (which *The New Republic*) has dubbed 'Samurai management') to faddism and claims it to be just another variant of the macho-flavoured Commander and Change Models:

> The sharp distinction between thinkers and doers will remain intact but will be camouflaged by cosmetic devices—quality circles, work groups, collaborative teams, encounter groups ... which serve to soften or blur the underlying management control ...
>
> This silliness has already begun. [The author makes reference to Ouchi's *Theory Z* and Pascale and Athos's *Art of Japanese Management*.] ... Because the authors in no way challenge the dominance of professional managers, their prescriptions are mere management techniques to achieve short-term profitability ... there will be no real collective decision-making because managers cannot afford to lose control (1981:30).

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Although Reich's view is a bit extreme, we think the issue of executive control does strike a nerve. It is the willingness to 'lose' some of this control that forms the basis of our next model.

THE CRESCIVE MODEL

The scenario

As a general manager, you have just received a proposal to continue the development of a new product. You know that if you approve it, you will confer substantial status on the person who proposed it, so you suspect there's some exaggeration in the figures. Nonetheless, in the light of the manager's track record, you feel that the estimates of profit are probably achievable. Equally important, the proposal fits the general direction you envision for the firm. After meeting with the manager to resolve some details and agree to some milestones for reviewing progress, you approval the proposal.

The model

The Crescive Model addresses some of the limitations ascribed to the previous approaches by addressing the question 'How can I encourage my managers to develop, champion, and implement sound strategies?'

In this model, strategy comes upward from the firing line, rather than downward from the top. The role of the CEO has moved from designer to that of premise-setter and judge. Here, the strategic problem revolves around the CEO's ability to define organization purposes (i.e. set decision premises) broadly enough to encourage innovation, and to select judiciously from among those projects or strategy alternatives that reach his attention. This is a delicate balancing act. Too broad a definition may permit diffused attention by the firm or even encourage certain counterproductive behaviours among managers (Bower, 1970); and a proliferation of proposals may produce cognitive strains for the CEO. But too narrow a definition might squash initiative, since managers tend to suppress proposals which are deemed to have a limited probability of approval (Carter, 1971). In effect, strategic management, under this model, consists of creating and maintaining a fine balance between what Burgelman (1983) calls 'autonomous strategic behavior' at the sub-unit (SBU) level, and what Bales (1977) has labelled the 'president's paradox' of control at the top.

How can the CEO encourage a vigorous pace of innovation within the firm and still maintain an effective filter for screening out inappropriate or ill-conceived programmes? The answer to this question is, we believe, key to the next generation of strategic management. We also believe that research, for normative purposes, has only begun to address the question from a strategic (total enterprise) perspective. The works of Burgelman (1983) and Quinn (1979) represent the first steps of building on the product or technological innovation literature (which tends to focus on the functional department level, such as the R&D laboratory), the 'venturing' literature and their own empirical research to start suggesting strategic designs for nurturing entrepreneurship within large corporations.

In a moment, we will suggest a model that draws from quite a different theoretical base—agency theory—that arrives at results quite similar to those of Burgelman and Quinn, i.e. a model of strategy 'growing' from within the bowels of the firm (hence, our label crescive, from the Latin *crescere*, to grow), but which is neither based upon our own empirical

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research nor upon the innovation literature. Instead, we developed our thinking by first deducing from various pieces of what we would call 'pathology-oriented' empirical research, as well as case histories and anecdotes, that such a model of corporate behaviour indeed exists. Secondly, we asked whether the behaviour we observed need be pathological—could it not represent harnessable energy? Finally, for the purposes of exposition, we put on our normative caps and took the tentative developmental steps outlined below.

But, before we outline those steps, let us briefly illustrate some of the research and examples which influenced our thinking.

Bower's (1970) study has already been cited as exemplifying sub-unit-initiated strategic behaviour. One key conclusion to be drawn from his case histories, however (see, for example, Industrial Products, ICCH No. 6-369-019), is that field managers will expend incredible amounts of energy to bias estimates, hide pet projects, or otherwise attempt to influence the formal capital budgeting process in order to pursue strategic initiatives identified at the local level. This behaviour is 'pathological' in the sense that managers are sometimes forced to be devious in order to take advantage of the market opportunities as they perceive them. An additional key conclusion is that, as investment alternatives ascend through the corporate hierarchy, their promotion by credible champions often overrides their inherent economic justification. The ill-fated Fireguard project in Industrial Products was funded by the Board because its champion, the division manager, 'bought' the biased estimates of the project's initiator, and, in turn, successfully 'sold' his superiors by force of his own track record and credibility.

Whereas the Fireguard example was one where the corporate strategy-making premises were set too vaguely (or not at all), the case described by Carter (1971) was one of the premises being interpreted too narrowly: project initiators sometimes suppressed new ideas when they anticipated non-conformity with top management goals—often without the goals being explicitly articulated. In other words, goals were inferred (at lower levels), or the perceptions of goals were shaped, by the signals inherent in previous judgements (decisions) made by the CEO.

In professional organizations where goals are less tractable, as in universities or in some 'think-tanks', the behaviour of key operators can be perceived by observers to be somewhat disconnected. March's 'garbage can' model of organizational choice describes such organizations as consisting of a Brownian motion among problems, solutions, decision-makers and issues (goals), where each of these elements attach and detach themselves opportunistically to and from each other over time (Cohen, March and Olsen, 1972). Although the 'garbage can' model was intended as merely descriptive, we see it as potentially pathological: as in the Bower and Carter research, clearly there is strategic activity within the organization which generates energy. But the energy is not harnessed for strategic advantage.

This need not be. A remarkable account of the successful harnessing of creative energy through the artful balance of prodding, nurturing, and nudging against shaping, controlling, and restaining, is given by Tracy Kidder in *The Soul of a New Machine*, where he describes the development of a new computer for Data General Corporation:

> Adopting a remote, managerial point of view, you could say that the Eagle project was a case where a local system of management worked as it should: competition for resources creating within a team inside a company an entrepreneurial spirit, which was channeled in the right direction by constraints

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sent down from the top. But it seems more accurate to say that a group of engineers got excited about building a computer. Whether it arose by corporate bungling or by design, the opportunity had to be grasped. In this sense, the initiative belonged entirely to West and the members of his team (1981:272).

> ... to at least some engineers, at the outset, Eagle appeared to be a fairly uninteresting computer to build. Yet more than two dozen people worked on it overtime, without any real hope of material rewards, for a year and a half; and afterward, most of them felt glad. That happened largely because West and the other managers gave them enough freedom to invent, while at the same time guiding them toward success (1981:275).

Allowing too many strategy-initiators free rein, of course, can lead to a corporate mess of unco-ordinated strategies—that is the inherent limitation of the Crescive Model. It is the fear of this loss of control, in fact, which Gluck *et al.* cite as the prime motive for the recentralization of strategic management. This is how they describe the prelude to American industry's evolution into what they have identified as the fourth, or 'modern', phase of formal strategic planning:

> As the organizational capability [using the SBU concept] for detailed product/market and business-unit planning spreads through the organization, the number of issues raised, alternatives surfaced, and opportunities developed expands alarmingly. Top managers soon recognize that explicit choices are being made by planners and managers deep down in the organization without top-level participation—and that these decisions could significantly affect their company's long-term competitive strength and well-being. *This unsettles top management* and pushes them to a heavier involvement in the planning process, Phase IV (Gluck *et al.*, 1980:158; emphasis added).

Note the tone of panic at the thought of top management giving up control over strategic initiative to lower levels. Yet, this willingness to relinquish control, to delegate partial responsibility for strategy as well as tactics is precisely what distinguishes the Crescive Model from the previous four. The CEO in the crescive model must be willing to risk loss of control over strategy initiatives in order to capitalize on the new business opportunities impossible for him to apprehend from his perch at headquarters. For, as Mintzberg points out in his description of 'adhocracies' in complex, dynamic environments, 'either the formulator must implement his own strategy so he can reformulate en route ... or else the implementors must take responsibility for the formulation and do it adaptively' (Mintzberg, 1979:346).

The Crescive Model—a normative suggestion

The model we propose is an attempt to apply some rudiments of agency theory to strategic management. (A summary of applicable parts of the theory is given in the Appendix. A more formal view is given by Jennergren, 1980.) In a sense, the relationship between a chief executive officer and the general managers of profit centres in a diversified firm can be considered to be similar to that described by the principal/agent model of the relationship between a firm's owners and its managers. The CEO entrusts organizational resources to division managers and, particularly in diversified firms, he cannot know and understand all

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of the strategic and operating situations facing the divisions (Berg, 1965). Therefore, if he is to exploit the fact that they can see strategic opportunities which he cannot, he must allow them discretion in the commitment of resources. His dilemma is that he is ultimately responsible for the total organization, but must give up some control over it in order to foster strategic opportunism and achievement. His career (if not his personal wealth) is in the hands of others. How can he manage this? We have taken some tentative steps toward developing the Crescive Model in answer to this by identifying five propositions with interesting implications for the strategic management process.

1. The chief executive cannot monitor all significant opportunities and threats.
2. The power of the executive to impose strategy on the organization is limited; among other things, the shortage of executive talent allows successful managers to leave if they do not like the working conditions.
3. Although the executive strives to plan, he cannot escape the reactive mode, brought on in part by his role as giver-of-rewards, and part by the complexity of a diversified operation.
4. Since the chief executive relies on his subordinates to provide data and generate strategies, as well as to deliver results, he must be careful with the incentives he establishes. Subordinates can exploit the CEO's vulnerability, for example, by 'lowballing' on forecasts they will be called on to meet, by withholding total efforts, or by misdirecting resources toward pet projects. Only by reviewing a manager's performance on a series of projects over a relatively long period of time can this risk be controlled.
5. Strategy formation often occurs in groups and usually incorporates perceptions, rather than incontrovertible facts. However, management can take actions which will ameliorate some of the difficulties inherent in group decision-making.

The model implies a description of a strategy-making process appropriate to the large divisionalized firm and offers some guidance for the chief executive trying to manage his firm strategically.

A detailed consideration of each proposition follows.

The chief executive cannot monitor all significant opportunities and threats

If the company is highly diversified, it is difficult or impossible for senior management to stay abreast of developments in all of the firm's different industries. Similarly, if an industry is shifting very quickly (e.g. personal computers), information collected at lower levels often becomes stale before it can be assimilated, summarized, and passed up the ranks. Even in more stable industries, the time required to process information upward through many management levels can mean that decisions are being made based on outdated information.

As a result, in many cases the CEO must relax his expectations concerning the extent to which strategic plans can be developed centrally. Instead, an incentive scheme or 'free-market' environment is established to encourage operating managers to make decisions that will further the long-range interests of the company.

The power of the chief executive is limited

In the typical private corporation, the chief executive enjoys substantial but limited power. His power derives from his ability to bestow rewards, allocate resources, and reduce the

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uncertainty for members of the organization. Thus, to an extent, the executive can impose his or her will on the other members of the organization. However, the executive's power is limited by the labour market (since employees can leave and join another firm), and by key managers' control over information or over customer relationships.

Whether or not executives operate by 'muddling through' (Lindblom, 1959) seems to depend on their relative power in the organization. If the executive has relatively little power, all decisions must be compromises, and the outside observer will see little evidence of purposive behaviour. On the other hand, if the executive enjoys substantial power, behaviour will look more purposive, and 'muddling' much less in evidence. Perhaps this explains why 'muddling through' was first observed in the public sector, where the chief administrators typically have less power and autonomy than in most private firms.

The need for making time-critical decisions

In contrast to the dictum that executives should be planning-oriented and thoughtful, most spend the majority of their work day attending to short-range problems (Mintzberg, 1975). The fundamental conflict between planning and action has much to do with the executive's role as giver-of-rewards. People bring strategic matters to him partly to secure recognition and advancement; in addition, he is responsible for managing the resources under his control. Thus, any realistic model of the strategic process must recognize that executives do not plan much; they are bombarded constantly by requests from subordinates.

Strategy in a multi-person context

The CEO (as well as the division general manager) relies heavily on subordinates when formulating strategies. First, he needs up-to-date information about conditions in each division. Secondly, he needs his subordinates to formulate strategies (or review strategies formulated by others) and sign off on operating goals.

The CEO's dependence on his subordinate managers creates a thorny control problem: in essence, if a manager knows he will be accountable for plans he formulates or which use information he provides, he has an incentive to bias his estimates of the division's performance. The conclusions that one might draw from applying agency theory (see Appendix) to this situation—essentially, one of strategy formulation and implementation in a multi-person setting—would be as follows.

1. If the CEO wants his managers to deliver unbiased estimates, he cannot hold them tightly accountable for the successful implementation of each strategic proposal. Without such accountability, he places great emphasis on commitment as a force for getting things done.
2. The CEO must be able to compromise regarding the programmes he wishes to see undertaken. A second-best strategy championed by someone capable and determined may be worth more than the optimum strategy backed with only lukewarm support.
3. In order to assess the true ability and motivation of any subordinate, the CEO must observe him over a long period of time on a number of different projects. This also implies that career advancement must be based on probabilistic, rather than absolute success of strategic initiatives—occasional failures should be expected, tolerated and not penalized (Zakon, 1982).

One means to accomplish the above is a 'safety valve' resource allocation programme which, like the IBM Fellows or the Texas Instruments 'Idea' programmes, makes available a

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special resource capital fund to provide the resources for those promising ideas which arise *out* of synchronization with the (typically annual) capital budgeting cycle. This allows opportunities to be seized as they are perceived and developed by their champions.

Strategies are the product of group decision-making
Strategies are rarely created by single individuals; usually, they are developed by groups of people, and they incorporate shared perceptions of reality, rather than reality itself. The group nature of the process introduces a number of obstacles—primarily, avoidance of uncertainty and a tendency to smooth over conflicts prematurely—to achieving the goal of economic rationality. The general manager can use several techniques to reduce the distortions to which group decision-making is subject. These include maintaining a healthy difference of opinion with the organization, using a formal, separate planning group reporting to the corporate level in addition to the strategic management process in the line organization, and using techniques (such as organizational development) to reduce defensiveness and increase the receptivity of the group to discrepant data.

To minimize the risk of group-think—persons working together accepting each other's biases and losing the ability to think critically—many corporations use a staff planning team which runs in parallel with line decision-making. Carlson at United Airlines depended on his staff to prepare background studies to support line proposals (Pascale and Athos, 1981). TRW's headquarters planning staff offer PIMS reports and analytic support to SBU managers on an as-requested basis (Robert Saslaw, personal communication).

Also, the *premises* a strategy-making group will use to approach its business, and the content areas it will consider, will reflect beliefs held by members of the group. To control the strategic process, the CEO can shape these premises in at least three ways—by directing the attention of the strategy-makers to specific content areas, by endorsing a particular planning methodology, and by altering the structure of the organization. For example (1) the CEO can emphasize a particular theme or strategic thrust ('we are in the information business') to direct strategic thinking, (2) the planning methodology endorsed by the CEO also shapes premises: the product-portfolio approaches (such as BCG's growth-share matrix) will yield different strategies than will a system that reviews business-level strategies in terms of ROI hurdle rates and (3) structure will influence the kinds of strategies proposed: a firm with a world-wide product structure will probably generate strategies for world-wide domination in certain product categories, whereas a firm with an area-oriented structure will probably generate strategies to secure maximum penetration of all products in particular countries.

The responsibilities of the chief executive

The Crescive Model for strategic management suggests some tentative generalizations concerning how the chief executive of the large divisionalized firm should act in order to help the organization generate and implement sound strategies. The recommendation consists of five elements: (1) maintain the openness of the organization to new and discrepant information, (2) use a general strategy to guide the firm's growth, (3) manipulate systems and structures in very general ways to encourage bottom-up strategy formulation, (4) intervene in the logical incrementalist manner described by Quinn (1978) and (5) adjust structure and staffing to minimize moral hazard[2] problems. We will deal with these issues in subsequent research.

[2] See Appendix.

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CONCLUSIONS

In this paper, we have explored five approaches to strategy implementation. Our presentation, being in caricature form as it was, simplified to the extent of implying five mutually exclusive categories. In truth, we believe these are not mutually exclusive forms, but probably modal, in the sense that any particular firm will probably engage in a variety of the models, but with different emphasis. Some firms, particularly those with 'two cultures' (for example, TRW has both aerospace and automotive supply groups of SBUs; the former are 'high flyers' and Californian, the latter 'mature' and industrial Midwestern), could conceivably be bimodal.[3] Although we make no claim as to the empirical reality of this framework, the reaction by executives to whom it has been presented has, in fact, been one of being able to see their own firms 'mapped' onto a five-point continuum, with the curve peaking at the modal form or forms (TRW, for example, peaks at both the commander–change juncture and at the crescive point).

These models represent a means of thinking about the range and complexity of tools the CEO might consider when organizing his firm's approach to strategy-making. None of these approaches is correct for all companies. Their use should depend on such factors as degree of diversification, rate of growth and change and existing culture. Clearly, the Cultural or Crescive Models would be too elaborate for some, perhaps less diversified and less complex firms.

The five models also represent an increasing attention to bring implementation forward in the strategic management process. The first three models assume implementation as after-the-fact. The number of formulators are few; the rest of the organization is somehow manipulated into implementation. The remarkable thing about the Cultural Model, however, as quoted above in the Westinghouse case, is how the large amount of time invested in consensual decision-making pays off with almost instant implementation. A similar claim can be made for the Crescive Model—by the time the strategy alternative has come forth with a champion attached to it, most of the energy in formulation has been expended and the strategy is practically in its implementation. These differences in effort

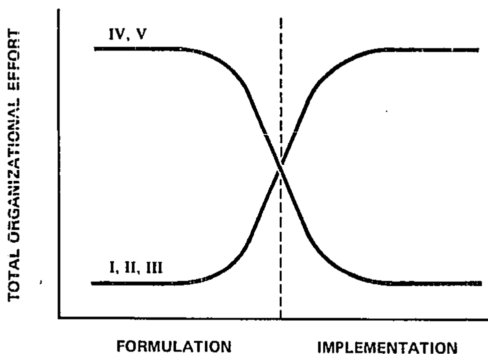

Figure 1. Relative effort expended in strategy formulation vs. implementation. Numerals correspond to the order of presentation of the models: I = Commander, II = Change, III = Collaborative, IV = Cultural and V = Crescive

[3] This is somewhat akin to what Ansoff refers to as 'multicultural coexistence', in which the internal behaviour of organizational units differ according to their strategic thrusts and the level of environmental turbulence each faces (Ansoff, 1979:123).

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expended on the formulation and implementation sides of strategy might be as depicted in Figure 1. Although Figure 1 depicts a sequential ordering of 'implementation' following 'formulation', we see a growing acceptance of simultaneity of the two instead of an artificial bifurcation, particularly in environments characterized by frequent or unpredictable change (Mintzberg, 1979).

To the extent that these models are nested—rather than separate categories—we think we have distilled some recommendations for multi-divisional, diversified firms operating in a variety of environments with varying rates of change. The essence of these recommendations is captured in analogous terms by the observations of Fernand Braudel, the French historian. In discussing the options available to heads of state during our recent economic distress, he states that:

> Economic life consists of several layers. At the bottom is what Braudel calls 'material life'—the daily grind of peasants and artisans, moonlighters and taxi drivers ... Above this is a second layer—the market economy, the transparent economic textbook world of supply and demand and clearing prices. Hovering above this is ... the sophisticated world of capitalism, which attempts to manipulate conditions in the layers beneath it.
>
> The wise State ... doesn't try to engineer society to some blueprint: it encourages the lower levels, the household and market economies. It sets them free to become creative (Minard, 1982:132–133).

As in public administration, perhaps in business policy: the 'sophisticated world' of strategic management can take a cue from Braudel, and encourage the line managers in the 'material life' of the business to create, champion and implement new strategic thrusts for the firm.

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APPENDIX

Agency theory lets us examine strategy implementation as an employment relationship involving two or more people. One, the *principal*, owns or controls the productive resources. On strategic questions, the principal is typically the CEO or the division general manager (we will use the CEO in the following discussion). The second, the *agent*, is hired by the principal to perform some task; the agent might be a division general manager (DGM) reporting to the CEO or a functional manager reporting to a division manager (we will use DGM). Agency theory offers a way to analyse systematically the task at hand, and devise incentives and measurement systems which will increase the likelihood that the agent (DGM) will execute the task successfully for the principal (CEO).

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Three concepts, *information assymetry, monitoring* and *moral hazard*, play a central role in agency theory. *Information assymetry* is the condition where the agent has more knowledge than the principal about the relevant decision. Assymetry occurs because the CEO needs accurate information from the DGM on which to base strategy, but he has no way to evaluate the accuracy of the information he receives. Asking the DGM to formulate his strategy, instead of providing a portion of the input for the total organizational strategy, still presents the same problem. Information assymetries tend to be worse in diversified firms than in firms active in only a few business areas; in the diversified firms, the CEO and group managers typically lack experience in all but a few of the company's market segments. (They tend to lack the time required to 'learn' each segment as well.)

Monitoring describes the extent to which the principal can observe whether the agent is performing the desired task. The principal can choose to monitor outcome or effort, or some combination of outcome and effort. When the 'task' is to implement a strategy, neither type of monitoring is particularly effective: on the one hand, the effort is hard to measure. If the principal imposes on the agent a complete strategy and tells him to execute it, he has no way of monitoring the level of effort the agent puts forth. He can count the number of hours the DGM spends at his office, but since 'management' is a subtle task, such crude measures approximate only poorly the kind of effort we need to measure. On the other hand, we cannot use success or failure of a project as a proxy for effort, since outcome depends on environmental variables not under the control of the DGM. (This is especially true when the CEO imposed the plan on the manager, without his agreement on its feasibility.) If the project fails, the agent blames the external factors, and the principal cannot easily disagree.

The term *moral hazard* describes the fact that the agent can take advantage of the principal if he desires. The CEO faces three kinds of moral hazards: (1) the DGM will bias his estimates, if the incentives and/or sanctions make this profitable for him, (2) he can divert resources from intended uses in order to meet performance standards imposed on him, to the detriment of the long-run vitality of the operation (one such technique is to defer expenditures for R&D and maintenance; more subtle techniques might involve, for instance, changing the accounting methods; in essence, the agent can usually find some way to divert resources in ways the principal will not detect) and (3) the DGM can withhold effort, if he knows that the CEO cannot tell the difference between failure due to insufficient effort and failure due to such extraneous factors as competitive pressure, recession, etc. In the light of the information assymetries, monitoring problems and moral hazards described, how should the CEO structure the employment relationship with his division managers? Three options can be identified, although none look particularly attractive: (1) if, in order to get truthful information, the CEO absolves the DGM of responsibility for successfully implementing a proposed strategy, the DGM has an incentive to shirk, (2) if the CEO forces the DGM to bear risk for the success or failure of the project, he will 'lowball' his estimates and perhaps divert resources, and (3) even if the CEO can prevent the DGM from diverting resources or biasing forecasts, then by making him bear risk for the outcome, the CEO will elicit extremely risk-averse behaviour, behaviour far more risk-aversive than the corporation would want.

In conclusion, our inability to structure effective employment relationships for strategic management action has three important consequences. First, managers place a great emphasis on 'commitment', since 'accountability' is relatively less meaningful in the strategic arena. As a result, it is very important that the management system encourage individuals to step forward as champions of projects which are consistent with the overall

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strategy. Secondly, the manager must be able to compromise regarding the programme he wishes to see undertaken. A second-best strategy championed by someone capable and determined may be worth more than the optimum strategy backed with only lukewarm support. Thirdly, in order to sort out the true skill level and motivation of any given DGM or other subordinate, the CEO must observe him over a long period of time, on a number of different projects. The subordinate gradually develops credibility, an important consideration in the resource allocation process.

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