

The Importance of an Integrative Approach To Strategic Management Research¹

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There is enormous potential for cross-fertilization in theory-building and applied research if the individual perspectives of industrial organization, marketing, and administrative behavior are utilized as complex tools for the strategic management scholar. In general, industrial organization and marketing can contribute to better understanding of strategy content issues, and administrative behavior to strategy process issues. Research findings will be richer if strategic management scholars work to develop mid-range theories that draw from the existing knowledge base of these disciplines and if they establish close working relationships with researchers from disciplines other than their own.

Strategic management has reached the point where integrative research approaches are necessary for continued progress in the field. Early research in strategic management has emanated from a variety of research streams, each employing different paradigms, units of analysis, causal presumptions, and researcher biases. This research has provided valuable insights into the problems of general managers from various perspectives, but the lack of integration among the research streams may ultimately retard the growth of strategic management.

The complexity of the field and the concomitant absence of a common definition that could provide a focal point for conceptualizing research interests are two of the initial hurdles with which researchers in strategic management have been faced. Schendel and Hofer [1979] were among the first to propose a paradigm that could serve as a focus for organizing diverse thoughts about the widely disparate activities undertaken by general managers. For the purposes of my discussion, *strategic management* will refer to the process by which general managers of complex organizations develop and utilize a strategy

to coalign their organization's competences with the opportunities and constraints present in their environment.

The purpose of this article and the three that follow [Porter, 1981; Biggadike, 1981; Jemison, 1981] is to encourage more integration of strategic management research. The following three articles will present the specific contributions to strategic management research of industrial organization (IO), marketing (M), and administrative behavior (AB). (For purposes of comparison, the authors have limited their discussions as much as possible to their respective disciplines, although each is aware of the correspondence and conceptual interchange among these disciplines.) In this introduction, I will discuss paradigmatic differences among these fields that have discouraged an integrated research approach, propose areas for research cross-fertilization, and suggest guidelines for an eclectic research approach.

Paradigm Comparison

The individual perspectives offered by industrial organization, marketing, and administrative behavior are distinct and rich with a tradition of theoretical referents as well as important research findings. Yet there is an enormous potential for

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cross-fertilization of these ideas in theory-building and applied research when these individual perspectives are utilized as complementary tools for the strategic management scholar. (These three fields together subsume most of the perspectives from which cross-disciplinary research in strategy-related areas may be initiated, but of course others exist, notably political science.) The three paradigms will be compared here on the basis of four characteristics: (1) the types of problems addressed, (2) the predominate research methods used, (3) the dominant inference patterns regarding causality, and (4) their relative usefulness in strategy formulation and implementation at the corporate, business, and functional levels. A summary of the comparison is presented in Table 1.

Types of Problems: Content or Process

Perhaps the key difference in these three para-

digms is in the type of problems with which each is concerned. A distinction can be made between the study of *what should be done* (the content of a firm's strategy) and *how it is accomplished* (the processes of strategy formulation and implementation). In general, researchers in IO and M have been concerned with content issues, while AB researchers have concentrated on process issues. This dichotomy between content and process can be likened to that between the two predominant issues facing managers: the economic issue and the sociopolitical issue [Jemison & Lenz, 1980].

The economic issue is closely aligned with strategy content. When managers deal with the economic issue, they are concerned with identifying a viable co-alignment between the prevailing environmental conditions and the firm's competences. Thus, strategic management scholars concerned with the economic issue focus their efforts on what should be done in a certain situation—the content of

Table 1
A Comparison of Strategic Management Paradigms

	Industrial Organization	Marketing	Administrative Behavior
Unit of Analysis	industry	firm within an industry	firm itself, or subunits of the firm
Type of Problem Addressed	content	content	process
Predominant Research Methods	longitudinal studies archival data	longitudinal and cross-sectional studies archival and perceptual data	cross-sectional studies perceptual data
Dominant Inference Patterns	industry structure sets limits on firm performance	managers manipulate product-market combinations to affect performance	managers manipulate organization's structure and process, which affect performance
Usefulness^a in Strategy Formulation			
corporate level	4	3	3
business level	2	4	3
functional level	2	3	4
Usefulness^a in Strategy Implementation			
corporate level	2	3	3
business level	1	4	4
functional level	1	2	4

^a4 = very useful; 3 = useful; 2 = occasionally useful; 1 = not useful

a firm's strategy.

In contrast, researchers dealing with the sociopolitical issue seek to understand the processes by which the organization and its social system deal with decisions about the economic issue. Thus, the ability to understand and deal with factors such as intra-organizational power structures, shared managerial beliefs, and bureaucratic momentum are all important in developing a process by which the firm will deal with its economic problems.

Of course, managers don't sort their decisions into neat packages marked "content" and "process" or "economic" and "sociopolitical." In fact, the complexity of strategic decisions requires that managers consider the sociopolitical issues involved in an economic issue, and vice versa. Unfortunately, our research outputs have not permitted us to offer a better understanding of the interactions among problems found in the content of strategy and problems found in the processes of formulating and implementing strategy.

As mentioned earlier, the contributions of IO and M researchers have generally been related to content issues. For example, IO scholars have extended our knowledge of how the industry in which a firm operates constrains the firm's potential strategic options [Porter, 1980]. They have also been instrumental in refining general research to develop an understanding of strategic groups [Hatten & Schendel, 1976; Hunt, 1972] and entry and exit barriers [Harrigan, 1980; Porter, 1979].

Marketing researchers have approached the strategy content issue differently. Their focus has been on the ways in which a firm can successfully compete once it has chosen its general competitive arena. The contributions of marketing researchers are directed toward the selection of an appropriate portfolio of product-market combinations and the relative emphasis to place on each of the components of that portfolio [Boston Consulting Group, 1968; Schoeffler, Buzzell, & Heany, 1974].

The field of administrative behavior has focused primarily on the processes by which strategies are developed and implemented. Two broad categories of process research are present in the AB literature: organizational action within the context of the environment, and managerial action within the context of the organization. Research on organizational adaptation and alignment [Aldrich, 1979; Emerson,

1962; Kast & Rosenzweig, 1974; Pfeffer & Salancik, 1978; Summer, 1980] is the predominant contribution of the first category, and, of the second category, research on the process by which managers develop the organizational/environmental alignments necessary for survival [e.g., Mintzberg, Raisinghani, and Théorêt, 1978].

The basic differences in the purpose and focus of IO, M, and AB have created substantial barriers to integrating findings relevant to strategic management, and these barriers are enlarged by different research methods and a priori assumptions about causality among the variables.

Research Methods

The effective integration of findings from process and content research is inhibited by a variety of method-related factors. This lack of integration is symptomatic of the problems inherent in relating research from different paradigms. An interaction among the research question, the unit of analysis, the nature of the data, and the researcher's training and preferences limits the transferability of findings. For example, the common unit of analysis for IO research (an industry and the firms in it) is fundamentally different from that commonly used in M (a product-market combination) and AB (an organizational subunit).

The type of data appropriate for each unit of analysis further restricts generalization and comparison. IO research is undertaken with objective, archival data that are very general in nature. In contrast, most AB research uses perceptual measures that are either provided by the subjects or interpreted by the researchers. These data differences naturally lead to disparities in research methods that hinder efforts to compare results across disciplines. Process studies are generally cross-sectional in nature because of data availability. It is difficult to finance, sustain, and motivate an organization to participate in longitudinal studies, especially at the top management level. Content research is often cross-sectional as well. Yet an important advantage of content research is that it lends itself to a longitudinal approach because the data are in public archives or because usually only few people need to be involved in gathering it.

Another factor working against integration of research is that most researchers have been trained

in one discipline and its associated research methods. There is rarely much incentive to venture into a new discipline because of the start-up costs required to learn the language of that discipline.

Inference Patterns Regarding Causality

IO, M, and AB hold different assumptions with respect to causality among the variables under study. The prevailing perspective in IO is that the structure of an industry substantially influences the opportunities for an individual firm's success [Bain, 1956, 1968; Caves, 1980]. Although this view has been modified by recent work that has identified strategic groups within an industry [Hatten & Schendel, 1976; Hunt, 1972] and mobility barriers [Caves & Porter, 1977], extra-organizational constraints are still seen as the determinants of a firm's success.

Marketing scholars maintain that a firm's selection of specific products for certain market needs (product-market combinations) will determine the firm's long-run success. Marketing researchers have developed four key concepts that provide guidance in how to choose among product-market opportunities in different stages of the market's evolution: market segmentation [Smith, 1956], the strategic business unit [Boston Consulting Group, 1968], the product-portfolio matrix [Schoeffler et al., 1974], and the product life cycle.

AB researchers have focused on the organization structures and processes that are most appropriate for successful strategy formulation and implementation. Some AB writers portray strategy formulation as a rational, comprehensive process whereby managers make decisions on the basis of complete consideration of the issues involved [Andrews, 1971; Ansoff, 1965; Learned, Christensen, Andrews, & Guth, 1965; Uyterhoeven, Ackerman, & Rosenblum, 1977]. However, these writers are more normative than descriptive. A substantial body of research findings has developed that suggests that the processes of strategy formulation and implementation are far from rational and comprehensive [Allison, 1971; Lindblom, 1959; Quinn, 1977; Simon, 1946]. In fact, what has emerged from this research is a portrait of general managers trying to steer their organizations in the direction of goals that have been negotiated and agreed on by the various coalitions that make up the organizations.

AB scholars also differ in their view of the degree of discretion exercised by managers. Some suggest that managers must select an appropriate organization structure and associated processes to match prevailing environmental conditions [Kast & Rosenzweig, 1974; Lawrence & Lorsch, 1969]. These contingency theorists are disputed by writers from the resource dependence and population ecology schools, who argue that organizations are controlled by their environments [Aldrich, 1979; Pfeffer & Salancik, 1978]. These deterministic views are challenged by others, such as Child [1972], who contends that managerial discretion is embodied in the concept of strategic choice. This may explain why some firms survive in violation of either the prescriptions of the contingency theorists or the insurmountable barriers proposed by the environmental supremacists.

Usefulness in Strategy Formulation

If one adopts a conception of three levels of strategy (corporate, business, and functional), as suggested by Hofer and Schendel [1978], an informative comparison of the utility of each of the three paradigms can be made.

In the formulation of *corporate* strategy (decisions about what businesses to be in), the IO approach appears to be the most useful because it allows the strategist to understand the constraints imposed by the industry. The key issue at the *business* strategy level is determining the best ways to compete in the domains outlined by the corporate strategy. Research findings from marketing seem to be most useful here. For example, the knowledge of effective methods of competition within a product-market segment can be greatly aided by such marketing contributions as product-portfolio analysis and market segmentation.

At the *functional* strategy level, managers are primarily concerned with issues of efficiency rather than effectiveness—i.e., maximizing the usefulness of resources at their disposal. The paradigms that offer a contribution here are those of M and AB. Marketing-related research provides an understanding of the product-market combinations that will offer the greatest potentials for synergy and functional efficiency. AB research helps the general manager appreciate the structure and process alternatives that may enhance or constrain a specific set of strategic alternatives at the functional level.

AB's contribution to strategy formulation is useful at each of these three levels. An understanding of the processes involved and the structural alternatives necessary for various strategic options is important as managers make choices about corporate, business, or functional strategies.

Usefulness in Strategy Implementation

Because they deal primarily with strategy content, IO and M are more important in strategy *formulation*. AB, however, appears to be the most useful paradigm for strategy *implementation*. Formulation is more content (output) oriented, involving decisions about what product-market segments to serve, whereas implementation requires the understanding and development of systems to operationalize the desired strategies. It requires an understanding of how individuals and organizational subunits will operate and interact as the firm serves its chosen markets.

Opportunities for Research Cross-Fertilization

Two necessary conditions must be met if the barriers between IO, M, and AB are to be lowered and cross-fertilization of research in strategic management is to occur. Researchers in these areas must perceive common links between the disciplines, and they must find it in their interest to explore and strengthen these links. A comparison of the three paradigms explored in this series of articles suggests several areas for research that could provide a common link and also offer incentives to researchers to extend and expand findings of their field with those of other fields. These potential research areas can be identified as research questions:

1. What is the relationship among the evolution of industries, markets, and organizations?
2. What are the ways in which strategic management research dealing with process and content can become more integrated?
3. How are the strategies of firms influenced by their abilities to understand and manage important interorganizational relationships?

Evolution

A common theme among the three articles that follow is that of evolution. The interrelated forces in

the evolution of industries, markets, and organizations provide a common link for the beginning of cross-disciplinary strategic management research. The incentive for the integration of such research is the relative ease of transferring the concept of evolution from an industrial to a market to an organizational context.

The central question posed by evolution-related research is the degree to which organizations are managed by executives versus the extent to which managers' actions are constrained by environmental forces beyond their control. This is more than a metaphysical question. Our business schools train future managers to develop conceptual, innovative strategies that will enable them to "manage" their firm's evolution. In addition, a host of societal decisions are made because of policy makers' perspectives on this issue. For example, governments at all levels have many agencies whose primary purpose is to control the actions of the managers of business firms. If managers do not control their organizations' destinies—and Pfeffer and Salancik [1978] and Aldrich [1979] have suggested that they do not—then our societal efforts may be misdirected.

A cross-disciplinary study of the concept of evolution may help managers direct their efforts toward areas where they can make the most effective contribution. For example, strategic management research may identify common stages in the evolution of an industry, market, or organization and further study may point out key decisions made at each stage. This initial descriptive understanding could lead to an exploration of the relationships among resource allocation actions taken at these stages and the effective use of resources.

Content and Process Integration

The area with the greatest potential for integration, but also the one fraught with the most difficulties, is content and process research. Researchers exploring content and process issues have been studying elements of the same concept but in markedly different ways. The fundamental challenge for researchers here is to find the common link, but the common link is elusive because it depends on how strategy is conceptualized.

An important question brought out in the three following articles is whether strategy is the unitary concept of an organization's competences being

aligned with its environment [Andrews, 1971; Learned et al., 1965], or whether it is a series of interactive factors, as suggested by Ansoff [1965], Hofer & Schendel [1978], Miles and Snow [1978], and Mintzberg [1978]. If research from the content and process schools is to become more integrated, strategy must be seen as a series of interactive factors. The more commonly accepted that a definition of strategy becomes, the sooner researchers can move forward from definitional issues to a better understanding of the forces surrounding the concept [Kuhn, 1970].

Researchers in IO, M, and AB are making important strides in expanding our understanding of the content and process issues within their respective fields. Now it is time to find points of commonality and deal with these in depth, as Allison [1971], Bower [1970], and Rumelt [1974] have done. The important work of these three focused primarily on either content or process issues—but did not neglect the other. Allison's three models of the same set of decisions caution the researcher that there are several process explanations for the same decision outcome. Bower explored the variety of processes that were necessary to reach a decision on content issues. Rumelt focused primarily on content and used process variables as mediators.

Most researchers in strategic management would probably agree that the content of a strategy is affected by the processes whereby the strategy is developed and implemented. Also, there is probably agreement that the processes available to managers are affected by the content of previous strategic decisions. But, our knowledge of content and process research may not advance beyond these general agreements unless researchers identify points of commonality between content and process issues and then concentrate on expanding our knowledge in those areas.

Interorganizational Analysis

Interorganizational analysis is an area that holds much promise for cross-fertilization of research findings. IO, M, and AB all address directly the necessity for general managers to deal with linkages with the organization. The challenge for strategic management scholars is to apply broader concepts to the study of such linkages so as to permit the integration of diverse research findings.

For example, both IO and AB researchers are concerned with different aspects of a firm's environment. Together, these approaches hold promise for an expansion and development of the coalition literature. Researchers could apply IO's understanding of industry rivalry conditions and AB's understanding of processes to develop predictive theories of how coalitions are developed among the various forces in an industry. This sort of work has already been undertaken by Hah and Lindquist [1975] and Mazzolini [1979].

Concluding Remarks

A consideration of the historical and practical disincentives to research integration and opportunities for research cross-fertilization leads to three recommendations of ways in which researchers could become more eclectic: developing mid-range theory, actively seeking out research associates with complementary backgrounds, and broadening the training of doctoral candidates in business policy. The first step is to provide a common theoretical framework from which researchers from diverse disciplines can draw fruitful research propositions and hypotheses. The development of this theoretical framework should begin with mid-range theories that draw on the existing knowledge base in the disciplines contributing to strategic management. In turn, the mid-range theories can be used as conceptual building blocks on which integrative, hypothesis-testing research can be based.

Recent contributions to mid-range theory development in strategic management have been offered by Paine [1979] and White and Hamermesh [1981]. Paine outlines an integrative contingency theory of strategic management based on more limited contingency theories from the AB literature. White and Hamermesh have built a mid-range theory of business unit performance based on previous work in IO economics, organization theory, and business policy.

Mid-range theories in strategic management will be useful in implementing the next suggestion—multidisciplinary research groups. Scholars in strategic management should seek out research associates whose interests are complementary but whose training is in a different discipline. This seems more workable than many researchers trying

to learn entirely new disciplines. Such a joint research approach would provide exposure to analytical frameworks, policy issues, and methods employed by the others' disciplines. The key to success here is that the interests of the researchers should be similar enough to stimulate interest, but their approaches and personal backgrounds should be dissimilar enough to offer truly different perspectives on the problems. The potential for synergy in this approach seems to outweigh any disadvantages resulting from a longer start-up time.

The final step that should be taken will entail an examination of the ways in which doctoral candidates are trained. The very nature of a doctoral program is specialization. Nevertheless, doctoral candidates specializing in strategic management and expecting a career involving research should be counseled to broaden their perspectives as much as

possible. This broadening should be in areas that have their own theoretical content—e.g., economics, political science, marketing—and that could act as additional stimuli to cross-disciplinary research once the candidate begins a research program.

The challenge to strategic management researchers and educators is clear. We can continue to work in relative conceptual isolation by drawing on limited disciplinary bases for research purposes, and expect our results to be correspondingly limited in their usefulness and generalizability. Or, we can take steps to implement a multidisciplinary approach that reflects the richness and complexity of strategic management. The more that we are able to integrate the ideas and findings from a variety of disciplines, the greater will be our understanding of the phenomena involved and the more rapidly will this understanding be achieved.

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