THE CONCEPT OF STRATEGY: From Business to Higher Education

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The matter of transferring business practices to higher education is a tough topic. Even when a particular system appeals to higher education administrators, they are likely to treat it with immediate disfavor if the suggestion comes from trustees or legislators. On the other hand, if they happen to pick a business system on their own, they may just as readily commit themselves to its usage with an equal, if opposite, zeal. In either case, intuition is likely to outweigh logic.

No matter how such a system comes into use — intuitively or logically — it will, nonetheless, tend to follow a set pattern. First, the system will be widely acclaimed in the higher education literature; institutions will eagerly ask how best to implement it. Next, the publication of a number of case studies will appear, coupled with testimonials to the system's effectiveness. Finally, both the term and the system will gradually disappear from view.

After the process has run its course, the effects of a borrowed system will probably be more residual than direct. When a higher education institution adopts a system, or even is just exposed to its concepts and practices, the institution is likely to discover subtle changes in its management processes. The net effect of borrowed systems on higher education during the past 15 years has presumably been to help administrators become more rational, more sensitive to the value of quantitative information, and more likely to define and act upon their priorities. Certainly this has been the case with two of the most widely discussed systems in the past two decades: planning-programming-budgeting systems (PPBS) and management by objectives (MBO).

Another new idea, too loosely structured to be called a system, has entered the higher education lexicon during the past five or six years. It is borrowed from the business literature, and most often it is called strategic planning. While the idea is still being developed, Baldwin (1983) claims that strategic planning is here to stay. The logic behind his assertion is shared by most authors today on strategic planning for higher education.

Before stepping further into the debate regarding whether this business-oriented concept of strategy ought to be applied to higher education settings, I would like to outline the context of the term "strategy" and the two associated terms "strategic planning" and "strategic management."

Strategy arose in the context of the military, and dates back as far as 550 B.C. (see Evered, 1983, for a brief review that compares strategy in military, business, and futures-research settings). Consistent with its military inceptions, strategy tends to require an advance plan, the resources necessary to implement this plan, and an ability to remain alert to signs that modification may be required. A few authors began using the term "strategic planning" in the late 1940s, but the work that is most often credited with provoking increased attention to strategic planning in the business literature during the 1960s and early 1970s was a book by Chandler (1962). Because the book was based on practice rather than theory, strategic planning evolved from an applied orientation and moved quickly into theoretical discussions and empirical research.

The term "strategic management" was brought into the lexicon with a landmark book edited by Ansoff and Hayes (1976), called From Strategic Planning to Strategic Management. In their introduction, Ansoff and Hayes recommended a shift away from strategic planning to compensate for several inherent deficiencies. They pointed out that strategic planning excluded certain variables that are critical for achieving preferred outcomes, as well as some dimensions that are important for maintaining a viable relationship between the organization and its environment — notably, psychological, political, and implementation factors. Ansoff, Declerck, and Hayes (1976) added in the book's first chapter that the outcome of strategic planning is simply a set of plans and intentions. By contrast, they suggested strategic management could include the operational management of the organization's competitive mode ("planning"), the entrepreneurial management of the organization's entrepreneurial mode ("adapting"), and the integrative management of both modes ("planned learning"). They referred to strategic management as a complex socio-dynamic process for strategic change.

Mintzberg, writing two years later, concurred with the implication that strategic planning was an inadequate concept, claiming that telling management to "state its goals precisely, assess its strengths and weaknesses, plan systematically on schedule, and make the resulting strategies explicit are at best overly general guidelines, at worst demonstrably misleading precepts to organizations that face a confusing reality" (1978, p. 948). Within five years of the Ansoff and Hayes book, the concept of strategic management had so
If the idea of strategic planning does actually fade away, sensitivity to the environment, awareness of competition, and appropriate responses will likely be some of the major residual effects. A major reason that strategic planning might conceivably go the way of PPBS and MBO is that academic practitioners have had little to rely on in the way of empirically derived generalizations about either the comparability of business and higher education organizations or specific ways to define and use strategy in higher education. For example, any differences between profit and not-for-profit organizations that might relate to strategy have never been demonstrated empirically (Wortman, 1979).

Some authors actively advocate using business methods in general, and strategic planning in particular, in higher education, but little empirical evidence supports their assertions (Doyle and Lynch, 1976; Schendel and Hatten, 1972). Typically, they imply that strategic planning will have value for higher education institutions because: (1) it has value for businesses, and (2) higher education institutions are or should become similar to businesses. Other authors list similarities between businesses and universities, such as concern with the external environment; internal effects of demographic change; and some degree of external control from government, politics, consumers, unionism, and tenure (Wood and Wood, 1981).

A more general argument that favors the application of business concepts to not-for-profit organizations claims that either the specific characteristics of the organization in question or the nature of the organization's external environment is more relevant to transfer than is the profit or nonprofit distinction (Cameron, 1983; Newman and Wallender, 1978). Without a great deal of additional research, all such claims are subject to dispute.

It is not surprising, therefore, that many take the opposite point of view. Some of the distinctions claimed, again without conclusive evidence, for higher education organizations are:

1. Higher education organizations have multiple, often conflicting goals.
   a. Many important higher education outcomes are intangible.
   b. Leadership charisma tends to be important because there are fewer measures of effectiveness in education than in business.
2. Chief executives lack power.
   a. Employees are more committed to their profession than to the organization.
   b. Resource providers tend to intrude into organizational functioning.
   c. There are restraints on the reward and punishment options.
   d. Open debate, broad participation, and approval from representative bodies are expected.
3. Strategic options are constrained in higher education.
   a. The influence of clients (students) on some higher education institutions is weak.
   b. Higher education lacks opportunity to achieve economies of scale.
c. Geographic location is a significant determinant of success.

d. Functions tend to be integrated, not separable.

This list summarizes points made by several authors (Blyen and Zoerner, 1982; Corson, 1960; Cyert, 1978; Hambrick, 1976; Newman and Wallender, 1978; D. R. E. Thomas, 1978; R. Thomas, 1980). Each point is widely accepted, although some may be more true than others for a particular institution. In some contexts, these points are taken as intrinsic characteristics of higher education that invalidate the use of business-derived management practices; in others, they are construed as flaws that could be remedied by using business management practices. In other words, even if one admits that these are true and unique traits, this in itself does not determine the suitability of applying business techniques to colleges and universities.

Although this issue cannot be decided here or anywhere else without further research, it is nonetheless helpful to consider briefly its implications. Researchers, for example, confront perplexing situations when they attempt to apply business strategy ideas to higher education. If outcomes are intangible, how does one operationalize the concept of organizational success to develop normative prescriptions for strategy? Assuming that charisma matters, does it become an important aspect of strategy? And if so, then how does one get an empirical handle on charisma? Moreover, if functions are integrated and inseparable, how can strategic actions be defined so that they are relatively independent of one another? Finally, but certainly not least troublesome, if the process of making major decisions is complicated due to a lack of central authority and high levels of interest-group participation, can an institution of higher education be said to have a meaningful strategy at all? Unfortunately, researchers so far have not dealt with these issues. Implicitly, they assume that such issues are irrelevant. Although the assumption may have merit, the lack of explicit attention to it is troubling.

Practitioners’ efforts to apply strategy in higher education are perhaps as perplexing as those of the researchers. Most important, as any seasoned president can avow, the list implies that a great deal of persuasion and negotiation will be inevitable in establishing an organizational strategy. Because strategy cannot be mandated from the top to the extent that it can in business, such changes become difficult. This point is confirmed in a study of five colleges that found, contrary to previous speculation, that the loosely coupled structures failed to promote organizational adaptability except under certain unlikely conditions (Rubin, 1979). Furthermore, the range of strategic options is narrower in higher education than in business if the list of differences between the two is accepted. For example, dramatic changes in geographic location are likely to be more costly in higher education. Even without a physical move, major changes in services or markets are severely limited by the organization’s dependence on professional employees with narrow specializations since they are not only entitled to participate in such decisions but they are also required — perhaps with some turnover of individuals — to carry them out. Such changes are further limited by interdependence among services and markets.

In the absence of research findings, however, the validity of differentiating higher education strategy from business strategy is unknown. That void would be less troublesome if more research on strategy, as it occurs in higher education, existed. Then administrators’ strategic decisions could at least be informed by a literature that describes what strategy is and how it works in colleges and universities. But writers on higher education strategy have not yet looked deeply and widely into their own experience for a model that is inherent to their setting.

Instead, most writers have typically offered suggestions based on their own logic or experience as to how strategy may be modified to suit higher education settings. For example, Flaten (1982) suggested that when applying strategy to not-for-profit organizations, only one change was necessary: instead of identifying goals as the first step of the process, the organization should conduct an analysis of its current situation. Such a simple change may, in fact, have an enormously beneficial impact. But the literature is very short on analyses of how the nature and practice of strategy can procure what colleges and universities need.

The following section presents an in-depth analysis of the evolution of strategy that draws largely on the business literature. The review covers a great deal of material spanning two decades, but its organization into three models simplifies the presentation and provides a valuable springboard from which the higher education version of strategy can be better understood. The section after that will describe related research, both in business and higher education, showing what is known empirically. This approach will show what and how we have borrowed from business and what we have missed. Finally, some of the missing links in both literatures are discussed.

Incorporating a great deal of the business literature underscores permits a fuller view of the concept of strategy than is possible from examining only the more limited higher education strategy. This approach not only permits looking at strategy in more advanced stages than currently exist in the higher education literature, but also allows higher education strategists to discover methods (theoretical, empirical, and practical) that might be borrowed from business. Furthermore, it allows higher education strategists the chance to learn from and avoid some mistakes made in the business literature.

EVOLUTION OF STRATEGY

Researchers and practitioners have referred to strategy freely — researchers have even measured it — for over two decades. Those who use the term generally believe that they are all working with the same mental model.
An underlying problem, however, is that strategy is both multidimensional and situational, making any genuine consensus on definition difficult. Strategy also suffers from another, more fundamental problem: that is, the term “strategy” has been applied to three distinguishable models, rather than the supposed single model that most discussions assume. Beyond reflecting various authors’ semantic preferences, the multiple definitions reflect three distinct, and in some ways conflicting, views.

This section seeks to analyze the ways strategy has been defined and operationalized in previous treatises and studies. First, it highlights those aspects of strategy where authors in the field appear to agree. Then it suggests three strategy models that are implicit in the literature.

A basic premise of strategy concerns the inseparability of organization and environment (Biggar, 1981; Lenz, 1980). The organization uses strategy to deal with changing environments. Because this change brings novel combinations of circumstances to the organization, the substance of strategy remains unstructured, unprogrammed, nonroutine, or nonrepetitive (Mason and Mitroff, 1981; Mazzolin, 1981; Miles and Cameron, 1982; Narayanan and Fahey, 1982; Van Cauwenbergh and Cool, 1982). Not only are strategic decisions related to the environment and nonroutine, but they are also considered to be important enough to affect the overall welfare of the organization (Hambrick, 1980).

Theorists who segment the strategy construct agree on several dimensions. They implicitly agree that the study of strategy includes both the actions taken, or the content of strategy, and the processes by which actions are decided and implemented. They agree that intended (what we plan to do), emergent (what we did, although we hadn’t planned it), and realized (what we did, planned or not) strategies may exist and differ from one another. Moreover, they agree that firms may have both corporate strategy (“What businesses shall we be in?”) and business strategy (“How shall we compete in each business?”). Finally, they concur that the making of strategy involves conceptual as well as analytical exercises. Some authors stress the analytical dimension more than others, but most affirm that the heart of strategy-making is the conceptual work done by leaders of the organization.

Beyond these general factors, agreement breaks down. Yet the differences in point of view are rarely analyzed. Only the existence of multiple definitions of strategy is noted and, as in Minnberg (1973), definitions are sometimes grouped by type. Analysis reveals that strategy definitions cluster into three distinct models, representing similar definitions in the literature.

This section briefly summarizes the three discernable strategy models. The name assigned to each model represents its primary focus. While these descriptions represent a collective version of similar views, each model also includes many variations of its central theme. Moreover, the three models are not necessarily independent. However, for present purposes, the three models will be treated according to their independent descriptions in the literature, and the theorists and researchers whose work exemplifies each model will be identified.

Model I: Linear Strategy
The first model to be widely adopted is linear and focuses on planning. The term “linear” was chosen because it connotes the methodical, direct, sequential action involved in planning. This model is inherent Chandler’s (1962) strategy definition: “Strategy is the determination of the basic long-term goals of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals” (p. 13).

According to the linear view, strategy consists of integrated decisions, actions, or plans that will set and achieve viable organizational goals. Both goals and the means of achieving them are subject to strategic decision. To reach these goals, organizations vary their links with the external environment by changing their products or markets, or else by performing other entrepreneurial actions. Terms associated with the linear model include “strategic planning,” “strategy formulation,” and “strategy implementation.”

The linear model portrays top managers as having considerable capacity to change the organization. The environment is, implicitly, a necessary nuisance “out there” that is composed mainly of competitors. Top managers go through a prototypical rational decision-making process. They identify their goals, generate alternative methods of achieving them, weigh the likelihood that alternative methods will succeed, and then decide which ones to implement. In the course of this process managers capitalize on those future trends and events that are favorable while avoiding or counteracting those that are not. Since this model was developed primarily for profit-seeking businesses, two of its important measures of results are profit and productivity.

While several assumptions underlie the linear model, the model is not made explicit in most discussions; they nonetheless follow from the authors’ tendency to emphasize planning and forecasting. For example: “Conceptually, the process of strategic planning is simple: managers at every level of a hierarchy must ultimately agree on a detailed, integrated plan of action for the upcoming year; they [start] with the definition of corporate objectives and [conclude] with the preparation of a one- or two-year profit plan” (Lorange and Vancil, 1976, p. 75). If a sequential planning process is to succeed, the organization needs to be tightly coupled, so that all ramifications of decisions made at the top can be implemented throughout the organization. This tight coupling assumption enables intentions to become actions.

A second assumption arises from the fact that planning is time-consuming and forward-looking. In other words, while decisions made today are based on beliefs about future conditions, they may not be implemented until months, even years, from now. In order to believe that making such decisions is not a waste of time, one must assume either that the environment is relatively pre-
TABLE 1. Summary of Linear Strategy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Linear Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample definition</td>
<td>&quot;... determination of the basic long-term goals of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals&quot; (Chandler, 1962, p. 13)</td>
</tr>
<tr>
<td>Salient environment</td>
<td>Competitive forces</td>
</tr>
<tr>
<td>Nature of strategy</td>
<td>Planning</td>
</tr>
<tr>
<td>Focus for strategy</td>
<td>Goals and actions</td>
</tr>
<tr>
<td>Aim of strategy</td>
<td>Goal achievement</td>
</tr>
<tr>
<td>Strategic behaviors</td>
<td>Change markets, products</td>
</tr>
<tr>
<td>Associated terms</td>
<td>Strategic planning, strategy formulation and implementation</td>
</tr>
<tr>
<td>Associated measures</td>
<td>Formal planning, new products, configuration of products or businesses, market segmentation and focus, market share, merger/acquisition, product diversity</td>
</tr>
</tbody>
</table>

*Classified by their definitions of strategy. Classification is not intended to imply that authors omit discussion of topics relevant to other models.*

Dictable or that the organization is well insulated from the environment. Also, most authors explicitly assume that organizations have goals and that accomplishing goals is the most important outcome of strategy.

Major characteristics of the linear model and the names of several authors whose definitions of strategy are consistent with this model are listed in Table 1. As the dates in these citations suggest, interest in the linear model waned in the mid-1970s. Ansoff and Hayes (1976) suggested that the reason for moving away from the linear model was that the strategic problem came to be seen as much more complex. Not only did it involve several dimensions of the managerial problem and the process, but also technical, economic, informational, psychological, and political variables as well. The model that arose next is labeled here the adaptive model of strategy.

**Model II: Adaptive Strategy**

Hofr's (1973) definition typifies the adaptive model of strategy, characterizing it as "concerned with the development of a viable match between the opportunities and risks present in the external environment and the organization's capabilities and resources for exploiting these opportunities" (p. 3). The organization is expected to continually assess external and internal conditions. Assessment then leads to adjustments in the organization or in its relevant environment that will create "satisfactory alignments of environmental opportunities and risks, on the one hand, and organizational capabilities and resources, on the other" (Miles and Cameron, 1982, p. 14).

The adaptive model differs from the linear model in several ways. First, monitoring the environment and making changes are simultaneous and continuous functions in the adaptive model. The time lag for planning that is implicit in the linear model is not present. For example, Miles and Snow (1978) portray strategic adaptation as recurring and overlapping cycles with three phases: the entrepreneurial phase (choice of domain), the engineering phase (choice of technology), and the administrative phase (rationalizing structure and process, and identifying areas for future innovation).

Second, the adaptive model does not deal as emphatically as the linear model with decisions about goals. Instead, it tends to focus the manager's attention on means, while the "goal" is represented by co-alignment of the organization with its environment.

Third, the adaptive model's definition of strategic behaviors goes beyond that of the linear model to incorporate not only major changes in products and markets, but also subtle changes in style, marketing, quality, and other nuances (Hofr, 1976a, and Shirley, 1982, list many such strategic behaviors).

A fourth difference follows from the fact that advance planning is relatively unimportant in the adaptive model, so, as might be expected, strategy is less centralized in top management, more multifaceted, and generally less integrated than in the linear model. However, top managers in the adaptive model still assume overall responsibility for guiding strategy development.

Finally, in the adaptive model the environment is considered to be a complex organizational life support system, consisting of trends, events, competitors, and stakeholders. The boundary between the organization and its environment is highly permeable, and the environment is a major focus of attention in determining organizational action. Whether taken proactively or reactively, this action is responsive to the nature and magnitude of perceived or anticipated environmental pressures.
In sum, the adaptive model borrows heavily on an evolutionary biological model of organizations. The analogy is made explicit in the following passage:

As a descriptive tool, strategy is the analog of the biologist's method of "explaining" the structure and the behavior of organisms by pointing out the functionality of each attribute in a total system (or strategy) designed to cope with or inhabit a particular niche. The normative use of strategy has no counterpart in biology (as yet), but might be thought of as the problem of designing a living creature . . . to exist within some environment . . . [Rumelt, 1979, pp. 197-198].

As interest in strategy as adaptation increased, so too did attention to the processes by which strategy arises and is carried out. Beginning with Mintzberg's (1972) modes of strategy making, a number of discussions have been presented to deal with the social, political, and interactive components of strategy (Fahey, 1981; Ginter and White, 1982; Greenwood and Thomas, 1981; Guth, 1976; Hofer, 1976b; E. A. Murray, 1978; J. A. Murray, 1978-79; Narayanan and Fahey, 1982; Tabatoni and Jarniou, 1976). Each of the authors dealt with organizational processes in the adaptive strategy model.

Adaptive strategy rests on several assumptions. The organization and its environment are assumed to be more open to each other than is implied in the linear model. The environment is more dynamic and less susceptible to prediction in the adaptive model. It consists of competitors, trends, and — of increasing importance — stakeholders. Rather than assuming that the organization must deal with the environment, the adaptive model assumes that the organization must change with the environment.

The adaptive model attempts to take more variables and more propensity for change into account than does the linear model. Table 2 lists terms that reflect this complexity, along with those authors whose strategy definitions fit the adaptive model. It also outlines the characteristics of the model. The number of authors using the adaptive model suggests that this strategy can successfully handle greater complexity and more variables than the linear model. However, opinion is mounting that the situation is complex in other ways. To meet this need, a third model of strategy is emerging.

**Model III: Interpretive Strategy**

Development of interpretive strategy parallels recent interest in corporate culture and symbolic management outside the strategy literature (for example, Dandridge, Mitroff, and Joyce, 1980; Deal and Kennedy, 1982; Feldman and March, 1981; Mayer and Rowan, 1977; Peters, 1979; Peters and Waterman, 1982; Pfeffer, 1981; Smircich and Morgan, 1982; Weick and Daft, 1983). While parameters of the emerging interpretive model of strategy are still unclear, a recurring theme suggests that the model is based on a social contract, rather than an organismic, view of organizations (Keeley, 1980). The organismic, or biological, view of the organization fits well with the adaptive model. The social

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**TABLE 2. Summary of Adaptive Strategy**

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<tr>
<th>Variable</th>
<th>Adaptive Strategy</th>
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<tr>
<td>Sample definition</td>
<td>&quot;... concerned with the development of a viable match between the opportunities and risks present in the external environment and the organization's capabilities and resources for exploiting those opportunities&quot; (Hofer, 1973, p. 3).</td>
</tr>
<tr>
<td>Salient environment</td>
<td>Consumer preferences</td>
</tr>
<tr>
<td>Nature of strategy</td>
<td>Achieving a &quot;match&quot;</td>
</tr>
<tr>
<td>Focus for strategy</td>
<td>Organizational change</td>
</tr>
<tr>
<td>Aim of strategy</td>
<td>Co-alignment with the environment</td>
</tr>
<tr>
<td>Strategic behaviors</td>
<td>Change style, marketing, quality</td>
</tr>
<tr>
<td>Associated terms</td>
<td>Strategic management, strategic choice, strategic predisposition, strategic design, strategic fit, strategic thrust, niche</td>
</tr>
<tr>
<td>Associated measures</td>
<td>Price, distribution policy, marketing expenditure and intensity, product differentiation, authority changes, pro-activeness, risk taking, multiplicity, integration, futurity, adaptiveness, uniqueness</td>
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</table>

*Classified by their definitions of strategy. Classification is not intended to imply that authors omit discussion of topics relevant to other models.
contract view, on the other hand, portrays the organization as a collection of cooperative agreements entered into by individuals with free will. The organization's existence relies on its ability to attract enough individuals to cooperate in a mutually beneficial exchange.

Interpretive strategy further assumes that reality is socially constructed (Berger and Luckmann, 1966). That is, reality is not something objective or external to the perceiver, that can be apprehended correctly or incorrectly. Rather, reality is defined through a process of social interchange in which perceptions are affirmed, modified, or replaced according to their apparent congruence with the perceptions of others.

Strategy in the interpretive model might be defined as orienting metaphors or frames of reference that allow the organization and its environment to be understood by organizational stakeholders. On this basis, stakeholders are motivated to believe and to act in ways that are expected to produce favorable results for the organization. “Metaphors” is plural in this definition because the maintenance of social ties in the organization precludes enforcing agreement on a single interpretation (Weick and Daft, 1983).

Pettigrew (1977) provided early signs of the interpretive model by defining strategy as the emerging product of the partial resolution of environmental and intra-organizational dilemmas. Although his emphasis on the political and processual nature of strategy might be considered compatible with the adaptive model, he offered several innovative contributions. Among them are: (1) his interest in the management of meaning and symbol construction as central components of strategy, and (2) his emphasis on legitimacy, rather than profit, productivity, or other typical goals of strategy.

Van Cauwenbergh and Cool (1982) defined strategy broadly as calculated behavior in nonprogrammed situations. They went on to posit middle management's central position in the strategy formulation process, as well as to point out that managing the organizational culture is a powerful tool in the hands of top management. The authors concluded by suggesting that their views differed from the traditional strategy literature in three ways: (1) organizational reality is incoherent in nature, not coherent; (2) strategy is an organization-wide activity, not just a matter of concern for top management; and (3) motivation, not information, is the critical factor in achieving adequate strategic behavior. Congruent with these authors' interest in organizational culture, Dirsch and Covaleski (1983) dealt with what they called strategic norms, or "institutional level action postures... that serve to guide acceptable behavior. [S]trategic norms involve the establishment of maps of reality or images held of organizations and environments" (p. 137).

The new themes in these writings suggest a strategy model that depends heavily on symbols and norms. Hatten (1979) saw this change as moving from the goal orientation of the linear model to a focus on desired relationships, such as those involving sources of inputs or customers. He envisaged a new theory of strategy that was oriented toward managerial perceptions, conflict and consensus, as well as the importance of language. The relatively few entries in the model summary presented in Table 3 indicate the fact that the model is too new to have become well developed.

<table>
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<th>TABLE 3. Summary of Interpretive Strategy</th>
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<tr>
<td>Variable</td>
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<tr>
<td>Sample definition</td>
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*Classified by their definitions of strategy. Classification is not intended to imply that authors omit discussion of topics relevant to other models.*

Rather than emphasizing changing with the environment, as is true of the adaptive model, interpretive strategy mimics linear strategy in its emphasis on dealing with the environment. There is, however, an important difference. While the linear strategist deals with the environment by means of organizational actions that are intended to affect relationships instrumentally, the interpretive strategist deals with the environment through symbolic actions and communication.

Interpretive strategy, like adaptive strategy, assumes that the organization and its environment are an open system. But in interpretive strategy, the attitudes of participants and potential participants toward the organization and its outputs are shaped by the organization's leaders, who do not make physical changes in the outputs. This attitude change seeks to increase credibility for the organization or its output. In this regard, interpretive strategy overlaps with ac-
tion that might be taken under the adaptive model. For example, when an adaptive strategist focuses on marketing to enhance product credibility, the strategist’s behavior could be classified as interpretive. Since strategy is multifaceted, examining the combination of this kind of marketing with other strategic moves permits classification into either adaptive or interpretive model.

A final noteworthy distinction between the adaptive and interpretive model relates to the ways in which each conceptualizes complexity. Adaptive strategy arose from (and attempts to deal with) structural complexity, notably conflicting and changing demands for organizational output. Interpretive strategy emphasizes attitudinal and cognitive complexity among diverse stakeholders in the organization.

Each one of the three models may be summarized briefly. In linear strategy, leaders of the organization plan how they will deal with competitors to achieve their organization’s goals. In adaptive strategy, the organization and its parts change, proactively or reactively, in order to be aligned with consumer preferences. In interpretive strategy, organizational representatives convey meanings that are intended to motivate stakeholders in ways that favor the organization. Each model provides a way of describing a certain aspect of organizational functioning to which the term “strategy” has been applied.

By analogy, one would have three descriptions of a single phenomenon if a geologist, a climatologist, and a poet were to model the Grand Canyon. One value of diverse models, whether they relate to strategy or the Grand Canyon, is that they offer several options. For example, to promote tourism in Arizona, the poet’s model of the canyon may be more apt than the other two.

STRATEGY IN THE HIGHER EDUCATION LITERATURE

With this analysis of the current state of the conceptual literature on strategy, it is helpful to examine specifically how the higher education literature relates to the concept of strategy. When writing about higher education, authors have dealt implicitly with strategy more often than explicitly. For example, Shirley, in an article published as recently as 1983, called strategic planning in the nonprofit sector “a new and virtually untapped area for research and writing” (1983, p. 92).

A brief survey of the many treatises in the higher education literature that relate implicitly to strategy may prove helpful. For example, topics relevant to linear strategy could include organizational goals (Conrad, 1974; Fenske, 1980; Gross, 1968), rational planning (Dickmeyer, 1982; Flieg, 1979), program review and priority setting (Dougherty, 1981; Lenning, 1980; Shirley and Volkwein, 1978); master planning (Cosand, 1980; Millett, 1980), and forecasting (Curtis, 1983; Dedde, 1983; Kirschling and Huckfeldt, 1980; Wing, 1980). Topics relevant to adaptive strategy could include organizational change (Bell, 1978; Bergquist and Shoemaker, 1976; Nordvall, 1982), marketing and market analysis (Kramf and Heinlein, 1981; Litten, 1979; Lucas, 1980; Muffo and Whipple, 1982; Zemsky, Shaman, and Berberich, 1980), and assessing the environment (Alfred, 1982; Baldridge, Kennerly, and Green, 1982; Barron and Ricci, 1982; Huff and Ranney, 1981). Finally, higher education readings that relate to interpretive strategy include those on such topics as organizational saga (Clark, 1970), mission (Keeton, 1971; Mosey and Busch, 1982; Tobias, 1982), and leadership (Dressel, 1981; Mayhew and Glenn, 1975; Fattullo, 1962; Peck, 1983; Simon, 1967).

Space prohibits reviewing the literature on all such topics, so the discussion that follows will focus on works that deal explicitly with strategy. These works are scattered among diverse periodicals and books. Some early pieces included articles by Orton and Derr (1975), Doyle and Lynch (1976), and Ellison (1977). Cope (1978) and Hosmer (1978) contributed the first works on strategy; Cope explained the concept and how it might be applied in higher education, and Hosmer discussed the ways strategy was used by three business schools. Summaries are available in Cope (1981), Peterson (1980), and Keller (1983).

Each of these works, as well as most of the others on strategy in higher education, expresses the adaptive model of strategy. For example, Peterson (1980) states that the primary purpose of strategic planning is to foster institutional adaptation; Keller (1983) states that the focus is on keeping the organization in step with the changing environment; and Cope (1981) states that the purpose is to achieve a synergistic match of program strengths with opportunities to serve society. Emphasis is on achieving a good fit between organizational activity and environmental demand (Baldridge, 1983; Baldridge and Okimi, 1982; Cameron, 1983).

Specifically, strategic actions are intended to increase the institution’s share of the market for students or to make its product mix — the academic programs its offers — more attractive (Francis, 1980; Meron and Qualls, 1979; R. Thomas, 1980). To achieve such goals, institutions may seek new clientele types and change their geographic scope, mission, programs, and goals (Shirley, 1983). Perhaps the most obvious example of the use of the adaptive model in the higher education literature, and the one most likely to evoke controversy, is a statement by Kotler and Murphy that presidents should aim to make every faculty member see “his or her job as sensing, serving, and satisfying markets” (1981, p. 487). However vehemently some faculty members may disagree with that particular statement, adaptive-model views are shared by most higher education authors writing on strategy.

Two major differences prevail between treatments of strategy in higher education and the adaptive model in business. First, higher education authors who deal with adaptive strategy often approach it from a highly linear, strategic-planning orientation. They may suggest ways of tightly integrating strategy among institutional subunits (Shirley, 1983), list steps to be taken toward developing strategic plans (Groff, 1983), or state that strategy simply aids new dimensions to a familiar institutional planning process (Cope, 1981). Linear strategy is also apparent among those authors who present strategic planning in
### Table 4. Business Empirical Descriptions of the Content of Strategy

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Method</th>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galbraith and Schendel</td>
<td>1983</td>
<td>1,200</td>
<td>Statistical: strategic actions - in consumer organizations: harvest, build, continue, climb, niche, cashout; in industrial organizations: low commitment, maintenance, growth, niche Basis for typology - level of investment, product/market specialization</td>
</tr>
<tr>
<td>Hambrick, MacMillan, and Day</td>
<td>1982</td>
<td>1,028</td>
<td>Statistical: strategic characteristics of four types of businesses: wildcats, dogs, cash cows, and stars (vary in market share and product life cycle) Basis for typology - prior conceptualization and resource allocation patterns, domains, capital configuration, and others</td>
</tr>
<tr>
<td>Harrigan</td>
<td>1980</td>
<td>60</td>
<td>Cases: business-level strategies: early exit, milk the investment, shrink selectively, hold present position, increase investment Basis for typology - amount and timing of change in product investment</td>
</tr>
<tr>
<td>Meyer</td>
<td>1982</td>
<td>19 Case/ statistical</td>
<td>Alternative responses to crisis: weather the storm, &quot;what strike?&quot;, good experiment Basis for typology - attitude of leaders</td>
</tr>
<tr>
<td>Miles and Cameron</td>
<td>1982</td>
<td>6 Cases</td>
<td>Strategic adaptation: domain defense, domain offense, domain creation Basis for typology - product/market orientation, innovation</td>
</tr>
<tr>
<td>Miles and Snow</td>
<td>1978</td>
<td>84 Case/ statistical</td>
<td>Strategic predisposition: prospector, analyzer, defender, reactor Basis for typology - risk orientation</td>
</tr>
<tr>
<td>Miller and Friesen</td>
<td>1978</td>
<td>81 Statistical</td>
<td>Successful strategies: adaptive firm/moderate challenge, adaptive firm/growth challenge, dominant firm, giant under fire, entrepreneurial conglomerate, innovator Basis for typology - product/market change and diversity, external pressure</td>
</tr>
<tr>
<td>Table 4: Business: Empirical Descriptions of the Content of Strategy (continued)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>---------------------------------</td>
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<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>Method</td>
<td>Types</td>
<td></td>
</tr>
<tr>
<td>Mintzberg</td>
<td>1978</td>
<td>2</td>
<td>Cases</td>
</tr>
<tr>
<td>Mintzberg and Waters</td>
<td>1982</td>
<td>1</td>
<td>Case</td>
</tr>
<tr>
<td>Porter</td>
<td>1980</td>
<td>Review</td>
<td>Synthesis</td>
</tr>
<tr>
<td>Stevens and McGowan</td>
<td>1983</td>
<td>90</td>
<td>Statistical</td>
</tr>
</tbody>
</table>

* In addition to the studies listed, many others have developed categories of strategy that apply primarily to specific business actions. For a review, see Bourgeois (1980).
which organizational leadership is seen as a pivotal strategic force. Still another is the relative emphasis on resource allocation or investment decisions. At this stage of research development, little guidance is available to evaluate the validity or utility of any of these typologies. Such guidance will evolve from the results of follow-on research and applied organizational analyses, some of which are under way. Examples of follow-on research will be shown in Table 5.

A few of the studies shown in Table 4 also appear in Table 5 because they categorized strategy and examined the relationship between strategy and organizational success (Hambrick, MacMillan, and Day, 1982; Harrigan, 1980; Miller and Friesen, 1978; Paine and Anderson, 1977). In addition, Hambrick (1983a) and Snow and Herbiniaq (1980) studied the typology that was developed by Miles and Snow (1978), and Hambrick (1983b) studied Porter’s (1980) typology. Twenty-five studies of strategy and success conducted in the past ten years are reported in Table 5. All but one, a mathematical simulation, used statistical analysis. Sample size ranged from 13 to 1,200 firms, with a mean of 303.

Most of the measures of organizational success for these studies of profit-oriented businesses were financial. Many of the studies dealt with the context in which strategy occurs. Some of them took account of various environmental conditions, notably the organizations’ levels of uncertainty, environmental dynamism, and hostility or scarcity of resources (Jauch, Osborn, and Gheec, 1980; Miller and Friesen, 1978, 1983; Paine and Anderson, 1977; Snow and Herbiniaq, 1980; Tuggle and Gerwin, 1980; Woo and Cooper, 1981). Two of the studies noted strategic differences between firms in different industries (Hambrick, 1983a; Harrigan, 1980). Three others deal explicitly with discovering effective strategies for recovering from decline (Hall, 1980; Hambrick and Schechter, 1983; Schendel, Patton, and Riggs, 1976).

The very nature of the research question in all of these studies suggests that managerial and organizational actions affect organizational success. In other words, success is primarily due to controllable factors. Accordingly, one implicit conclusion in many of these studies is that managerial initiative and organizational proactivity are beneficial. However, a few studies suggest the value of more conservative management. For example, Snow and Herbiniaq (1980) found that prospectors (organizations that proactively initiated new activities) and defenders (organizations that attempted to protect the viability of their current activities) did equally well in similar environments. In addition, some recent studies have found that concern for efficiency and internal factors were central to success (Hambrick and Schechter, 1983; MacMillan, Hambrick, and Day, 1982; Pearce, 1983).

The clearest generalization that can be made about the findings reported in Table 5 is that the relationship between strategy and success is complex and dependent on numerous contingencies. The contingencies include the firm’s size and diversification, perceived environmental uncertainty (dynamism, hostility, heterogeneity), perceived need for internal change, stage of product life cycle, and

<table>
<thead>
<tr>
<th>TABLE 5: Business: Empirical Descriptions of the Context of Strategy</th>
<th>N</th>
<th>Method</th>
<th>Outcome</th>
<th>Strategic Predictors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bies and Hall</td>
<td>1982</td>
<td>Statistical</td>
<td>Return on assets and real assets</td>
<td>Profiles, market share, product quality, marketing strategy, competitive strategy, profitability, and other financial characteristics.</td>
</tr>
<tr>
<td>Buzzell, Gale, and Sultan</td>
<td>1975</td>
<td>Statistical</td>
<td>Return on investment</td>
<td>Growth, market share, product quality, and financial characteristics.</td>
</tr>
<tr>
<td>Hambrick</td>
<td>1983a</td>
<td>Statistical</td>
<td>Proﬁt, market share, cash flow</td>
<td>Size, diversification, growth, market share, and profitability.</td>
</tr>
</tbody>
</table>
TABLE 5. Business: Empirical Descriptions of the Content of Strategy (continued)

<table>
<thead>
<tr>
<th>N</th>
<th>Method</th>
<th>Outcome</th>
<th>Strategic Predictors</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Statistical</td>
<td>Return on equity</td>
<td>Subgroups of firms within an industry follow similar strategies (patterns of investment in manufacturing, finance, and marketing). Each subgroup has its own pattern of relationships between strategies and performance.</td>
</tr>
<tr>
<td>358</td>
<td>Statistical</td>
<td>Fortune rating, return on assets</td>
<td>No strategy-environment combination brings success on both outcome measures; financial actions and production efficiency decreased both measures.</td>
</tr>
<tr>
<td>80</td>
<td>Statistical</td>
<td>Return on assets</td>
<td>Low socioeconomic development of service area, high price/service, flat hierarchy</td>
</tr>
<tr>
<td>1,011</td>
<td>Statistical</td>
<td>Profit</td>
<td>Capital intensity, value added, and manufacturing costs affect profit in four business types. Efficiency is profitable. Each of the four types showed certain additional strategy-performance relationships.</td>
</tr>
<tr>
<td>26, 36</td>
<td>Statistical</td>
<td>Sales growth, profitability</td>
<td>Environmental dynamism requires more analysis and innovation, hostility requires more analysis, heterogeneity requires more innovation — especially true of successful firms.</td>
</tr>
<tr>
<td>132</td>
<td>Statistical</td>
<td>Sales growth and profit</td>
<td>Concerted change in methods of reducing uncertainty, differentiating and integrating the organization is associated with success, piecemeal change is not.</td>
</tr>
<tr>
<td>81</td>
<td>Statistical</td>
<td>Achieved objectives</td>
<td>Certain archetypes succeeded (see listing in Table 4).</td>
</tr>
<tr>
<td>62</td>
<td>Statistical</td>
<td>Goal achievement</td>
<td>Four successful modes (adaptive planning, planning, adaptive entrepreneurial, and entrepreneurial/stress), depending on perceived uncertainty of environment and perceived need for internal change.</td>
</tr>
<tr>
<td>137</td>
<td>Statistical</td>
<td>Profit and risk</td>
<td>High orientation of key individuals toward internal factors (e.g., cost control), not external factors (e.g., relations with government agencies), is associated with performance.</td>
</tr>
<tr>
<td>50</td>
<td>Statistical</td>
<td>Four measures of financial performance</td>
<td>Formal and informal planners in small firms did equally well.</td>
</tr>
<tr>
<td>54</td>
<td>Statistical</td>
<td>Recovery</td>
<td>Upturn dominated by managerial action (better efficiency, strategies, processes); downturn dominated by inactivity and inefficiency.</td>
</tr>
<tr>
<td>620</td>
<td>Statistical</td>
<td>Profit</td>
<td>High market share and product quality, low investment intensity, certain size/diversification factors</td>
</tr>
<tr>
<td>88</td>
<td>Statistical</td>
<td>Ratio of income to assets</td>
<td>Different strategies (prospector and defender) work in similar environments.</td>
</tr>
<tr>
<td>N.A.</td>
<td>Simulation</td>
<td>Profit</td>
<td>Organization is better in manifest environment if it has resources to exploit it; sensitivity to environmental change is better only if environment has business cycles; unpredictable environment requires organizational slack and insensitivity to environmental changes.</td>
</tr>
<tr>
<td>112</td>
<td>Statistical</td>
<td>Low return on investment among high market share firms</td>
<td>High market share is not always profitable. Market stability, certain demand characteristics, and competitive posture mediate relationship.</td>
</tr>
<tr>
<td>126</td>
<td>Statistical</td>
<td>High return on investment among low market-share firms</td>
<td>Stable environments, selective competitive focus, and standardized products enabled high profit despite low market share. Emphasis tended to be high quality, low price.</td>
</tr>
</tbody>
</table>
what industry the firm is in, its subgroup within the industry, the firm’s competitive posture, the timing of competitors’ decisions, and the firm’s location. Furthermore, studies that used multiple measures of success tended to find that some strategies led to success on some measures, other strategies led to success on other measures.

Because of this, the studies do not provide general prescriptions for effective strategy. Instead, the strategist needs to understand the nature of the organization’s environment, industry, and situation, and the performance measures that are of highest priority. On the basis of that assessment, the strategist may examine studies such as those in Table 5 to see whether one of them relates to the situation and therefore provides guidance regarding the best choice of strategy. Most likely, since so many contingency combinations are possible, no research will be available to guide the strategist.

Although there are no universal prescriptions discernible in the research, certain ideas emerge as general themes. As noted above, managerial initiative, organizational proactivity, and concern for efficiency are usually valuable. Obtaining a large share of the market is usually profitable, but having a small share is not necessarily a liability. Quality and cost are key strategic dimensions. Innovation and diversification are sometimes beneficial but not always, so their use should be carefully considered. An integrated set of strategic actions is probably more effective than isolated or disjointed strategic actions. Finally, the choice of a particular strategy may depend on so many contingencies that it is organization-specific.

The overall impression from these two sets of studies is that empirical strategy research has a relatively long history in the business literature. It tends to use large samples and to rely on statistical analyses. Some typologies in the first set of studies were analyzed further in the second set, suggesting that researchers read each other’s work and are seeking to build common understandings. However, such synergy limits the scope of inquiry in that it reinforces the researchers’ tendency to deal only with the adaptive-strategy model as it appears in multiple cases. The field lacks studies that compare linear or interpretive strategies across cases, and it lacks studies that examine interrelationships among the three kinds of strategies in individual cases. Suggested means to remedy such omissions will be presented after a look at the comparable research on higher education organizations.

Higher Education Studies
A reviewer once characterized research on higher education administration as consisting largely of historical studies and descriptive surveys, empirical descriptions rather than tests of theoretical hypotheses, and dealing with the present while rarely attempting to predict change or define norms (Olive, 1967). She concluded that higher education administration was virgin territory for research. If one excludes case studies that attempt to define norms by proposing the value of a particular institution’s methods (“how we did it” is “how to do it”), Olive’s conclusions need hardly be altered to describe the status of strategy research in higher education. However, since the kind of study that Olive found typical does not meet the guidelines for inclusion in this discussion, the studies that follow are exceptions to Olive’s rule.

Five studies on strategy content in higher education have been reported in the past six years. They are listed in Table 6. The studies represent case and statistical methods equally, with sample sizes ranging from 14 to 40 organizations, with a mean of 22. Three of the studies developed categories of organizational strategies toward environmental change, such as risk orientation and initiative. One such study (Anderson, 1978) set out explicitly to compare consequences of changing with the environment versus not changing. He found that although change led to larger enrollments, it also brought about a decline in campus climate. Another applied the Miles and Snow (1978) typology that was developed in business to a study of six colleges, five hospitals, and six life insurance companies (Hambrick, 1982). A third developed strategy types inductively, by comparing ten years of strategy in each of fourteen colleges (Chaffee, 1984).

### TABLE 6. Higher Education: Empirical Descriptions of the Content of Strategy

<table>
<thead>
<tr>
<th>N</th>
<th>Method</th>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>Statistical</td>
<td>Strategy: maintain distinctiveness, broaden mission</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basis for typology — scope and nature of mission</td>
</tr>
<tr>
<td>14</td>
<td>Case/</td>
<td>Strategy: adaptive and interpretive</td>
</tr>
<tr>
<td></td>
<td>statistical</td>
<td>Basis for typology — organizational actions</td>
</tr>
<tr>
<td>17</td>
<td>Cases</td>
<td>Strategic states: presidential shakeup, shakeup and consolidation, change in competition, enrollment increase, planned expansion, student protest</td>
</tr>
<tr>
<td>17</td>
<td>Statistical</td>
<td>Basis for typology — organizational events</td>
</tr>
<tr>
<td>20</td>
<td>Cases</td>
<td>Responses to decline: resist, adapt, reassess priorities, cut back</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basis for typology — initiative, program change</td>
</tr>
</tbody>
</table>

The other two studies (Finkelstein, Farrar, and Pfister, 1984; Mingle and Norris, 1981) developed strategic action categories by grouping related actions, such as program change or resource reallocation. The study by Finkelstein, Farrar, and Pfister (1984) examined several cases longitudinally, as Mintzberg and Waters (1982) had done for a single case. Mingle and Norris (1981) categorized responses to decline, as had Harrigan (1980).
All the higher education studies assume the adaptive model of strategy, except that Chaffee (1984) began to outline the interpretive model. As was true in the business studies listed in Table 4, the adaptive model is apparent in the authors' emphasis on how the organization changes with its environment (changing/nobring its mission, shallooup, resisting or adapting), rather than examining how the organization deals with its environment either instrumentally or symbolically.

Seven studies in eight years have examined strategic predictors of success in higher education organizations, as listed in Table 7. Again, the studies are balanced between case and statistical methods. The sample size ranges from 1 to 245 organizations, with a mean of 75. Compared with the outcome measures for business studies in Table 5, the outcome measures for higher education are far more reputational and less financial. Nearly half of the higher education studies, but only one-seventh of the business studies, deal with strategies for recovering from decline.

**TABLE 7. Higher Education: Strategic Predictors of Organizational Success**

<table>
<thead>
<tr>
<th>N</th>
<th>Method</th>
<th>Outcome</th>
<th>Strategic Predictors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson (1978)</td>
<td>40 Case/statistical</td>
<td>Enrollment and financial growth, increased and financial enrollments, but generally led to lower morale, poorer campus climate.</td>
<td>Broadened clientele, increased financial revenue, higher enrollments, but generally led to lower morale, poorer campus climate.</td>
</tr>
<tr>
<td>Chaffee (1984)</td>
<td>14 Case/statistical</td>
<td>Recovery</td>
<td>Interpretive and adaptive strategies</td>
</tr>
<tr>
<td>Cohen (1982)</td>
<td>245 Statistical</td>
<td>Reverse enrollment decline</td>
<td>Key predictors were external, not subject to managerial control. Among management variables, only changing academic programs was effective.</td>
</tr>
<tr>
<td>Dube and Brown (1983)</td>
<td>1 Case</td>
<td>Enrollement and quality improvement</td>
<td>Formal version of adaptive strategy</td>
</tr>
<tr>
<td>Peck (1984)</td>
<td>19 Cases</td>
<td>Reputation for success</td>
<td>Informed judgment, dominant mission, highly innovative and opportunity-conscious</td>
</tr>
<tr>
<td>Smith and Finch (1975)</td>
<td>5 Cases</td>
<td>Recovery</td>
<td>Multiple approaches: new markets, professionalized management, retain mission</td>
</tr>
</tbody>
</table>

Higher education studies do not generally deal explicitly with the context in which strategy occurs. Unlike seven of the business studies, no study in Table 7 dealt with variations in the organizations' environments, such as dynamism, hostility, or uncertainty. The authors tended instead to control implicitly for environmental characteristics by selecting similar colleges for their samples—for example, assuming that a set of small private liberal arts colleges faced similar environments. Therefore, given that each study dealt with a single industry and with one type of organization at a time, contingencies did not play a role in these analyses as they did in the business studies. That is, the business studies' conclusions contained many qualifiers ("if the environment is hostile," "if the industry is highly innovative," and so forth) that described contingencies under which their findings are likely to obtain. The higher education studies do not lend themselves to that kind of conclusion.

Taken together, the studies in Table 7 suggest that a successful strategy is multifaceted, but requires that the institution retain its existing mission (Chaffee, 1984; Peck, 1984; Smith and Finch, 1975; and, depending on whether enrollment or climate matters most, Anderson, 1978). The results show some conflict, however, when it comes to assessing the role of innovation. Cohen (1982), Peck (1984), and Smith and Finch (1975) found positive results from innovation; Anderson (1978) and Chaffee (1984) found reason to be cautious about innovating.

Finally, Table 7 contains the only study in this review that casts doubt on management's ability to affect organizational destiny. The Cohen study (1982) used variables that managers could control and those they could not control, finding that the effects of the latter far outweighed nearly everything that managers could do. The issue is well worth testing far more extensively than either business or higher education researchers have yet attempted. Theoretically, it is at the heart of a fundamental controversy between those who assert the power of strategic choice (Child, 1972) and the population ecologists, who assert that environmental forces are more powerful than anything management can do (Hanhan and Freeman, 1977). To the extent that one accepts the arguments of the population ecologists, strategists can hope at best to make only a marginal difference. Cohen's findings in Table 7 are a sobering reminder of the point.

The higher education studies number only half as many as those in business. The gap is due to the shorter time and the relatively slow production rate of studies on strategy in higher education. Higher education research uses far more case studies relative to statistical studies, which helps account for the fact that sample size in higher education is, on average, less than one-fourth that in business.

Most higher education researchers (both those reviewed here and those whose studies did not meet the selection criteria) prefer case study research. The choice is valid and useful inasmuch as case studies permit longitudinal analysis and determination of cause-and-effect relationships, both of which are crucial issues in understanding how strategy works in an organization. Ironically and unfortunately, very few higher education studies have specified independent
and dependent variables, except in the small number of studies in Table 7, so they cannot examine the causal structures underlying strategy. Thus, there is a good deal of room for more and better strategy research both in business and in higher education, as the final section will discuss.

**ASSESSING THE STATE OF THE FIELD**

As noted earlier, theoretical business literature began with a linear model of strategy, then moved to an adaptive model, and is now formulating an interpretive model. Conceptual work on linear strategy is extensive, both in the literature on business strategy and in the literature on long-range planning in higher education. However, virtually no empirical research that fits the guidelines for inclusion in this review has adopted the linear definition of strategy. This gap, however, may be more semantic than real. At the time linear strategy was developed, much research that may be related to strategy used other terminology—such as “planning,” “long-range planning,” or “formal planning.” Some early studies that dealt with long-range planning examined the relative value of using a formal planning system, and produced conflicting results (see Hofer, 1976b, pp. 262-264, or Lorance, 1979, for a review). But by the time the concept of strategy became sufficiently well developed to foster empirical studies, its leading authors had moved into the adaptive model.

Adaptive strategy is the subject of most conceptual work, as well as all empirical work reviewed here for the business literature. Presumably the model will continue to play a significant role in business studies. If one focuses only on works dealing explicitly with strategy, adaptive strategy serves as the only model with any following in the higher education literature. More broadly, however, higher education authors have contributed several conceptual papers relating to linear and interpretive strategies. Treatments of strategy in higher education have been neither as comprehensive nor as frequent as those in business, due in part to approximately fifteen years’ lead time in the development of the field. Higher education authors have just begun empirical studies to explore the nature of adaptive strategy and its links to higher education performance.

Because interpretive strategy is an underdeveloped newcomer in the conceptual business literature, it is not yet available in the empirical business strategy literature. Moreover, higher education authors have only touched lightly on the interpretive model in the strategy literature. As might be expected, most of the work related to interpretive strategy in both business and higher education has been done outside the area of strategy.

Coverage of the three models, then, is similar in business and higher education, but the latter falls behind in quantity and, arguably, in sophistication of contributions. The conceptual strategy literature in business is broad in scope, precisely detailed, and highly differentiated. The conceptual literature in higher education—in fact in all nonprofit areas—is fragmented, repetitious, and relatively sparse. Most of it is applications-oriented and expository.

The business studies deal with complex sets of contingencies (including numerous dimensions of the organization’s environment and multiple industry characteristics) as they affect diverse organizations. Business studies make capable use of an array of research techniques, such as survey development, analysis from large-scale data bases, secondary case analysis, interviews, and identification of quantifiable proxy variables for complex concepts. They use the data in a variety of sophisticated statistical analyses. Because these methods can accommodate large sample sizes, the studies have considerable credibility in terms of the generalizability of their findings. The higher education studies do not deal with contingencies. Instead, they use narrowly defined samples to minimize the likely effects of unmeasured contingencies. For early works in the field, however, this is an acceptable approach because it simplifies the research agenda.

The relatively heavy emphasis on higher education case studies is potentially valuable, but few higher education authors have exploited such opportunities, as indicated in Tables 6 and 7. Case studies permit a deeper examination of the variables, their longitudinal behavior, and their apparent causal relationships than is feasible with statistical analysis. However, most case studies in higher education are not reported here because they are used for normative, not analytical, purposes. Used analytically, the case method affords a promising avenue for understanding strategy in higher education.

At this early research stage, the only conclusion one may draw confidently from the higher education studies is that radical departure from the organization’s mission is probably an unwise strategy—a conclusion many observers have drawn without the benefit of research. If Wortman is right in saying that “not-for-profit organizations can be helped more through rigorous, empirical studies in strategic management than can profit-making organizations” (1979, p. 353), then a great deal more work will be needed. Furthermore, the results should be reported in journals that are widely read, to promote the kind of complementary and synergistic development that business strategists have achieved. Suggestions for further strategy research in nonprofit organizations may be found in Cope (1981), Schendel and Hofer (1979), and Wortman (1979).

Five topics for further research arise from the present discussion. First, the critical factors differentiating higher education organizations from other organizations, such as those listed previously, have not been studied. By better understanding the extent to which such factors are present and relevant in higher education, researchers and administrators can identify which research on business organizations, if any, may be useful for colleges and universities. If these differences prove to be minimal, those in higher education can gain immensely from the extensive business literature. If, instead, they clearly indicate colleges are unique, proper precautions can be taken.

Second, and regardless of the outcome in the first area, higher education strategists can learn from the business literature. For example, some of the
An understanding of the philosophy of science and the power of scientific method must be developed and appreciated by researchers in the field. There is a need for empiricism that goes beyond mere subjective description and interpretation. The field needs to accept and develop more rigorous research methodologies to continue its advancement. In particular, the training of young researchers must be given careful attention.

Given the proportionately large body of strategy literature in higher education that is expository, illustrative, or atheoretical (and therefore did not meet the criteria for inclusion in this review), Schendel and Hofer’s point is even more applicable to higher education than to business. Another general rule that would benefit the development of strategy for higher education is to encourage researchers to build a coherent body of literature, based on one another’s conceptual and empirical works.

In addition, empirical studies at this early developmental stage of higher education strategy need to concentrate more on generating hypotheses than on testing hypotheses. Studies should develop comparative and normative descriptions of institutional strategy that are based on concepts rather than on functional attributes. Such studies would serve two important purposes. First, they would ground the concept of strategy in the experience of higher education institutions themselves. Second, they would yield suggestions about how the concept of strategy in higher education could be operationalized in statistical studies. The measures used in business studies often have no counterparts in higher education.

Higher education researchers should more fully exploit the opportunities offered by the case study method, while also developing more and better quantitative, statistical, large-sample projects. In both cases, longitudinal research is needed. And similarly, these studies should occasionally include diverse types of institutions and, in some instances, compare business organizations with colleges, as Hambrick (1981a, 1981b, and 1982) has done. When such a study does indeed focus on a single type of institution, researchers should recognize that most existing studies have dealt with private liberal arts colleges and, if appropriate, select a less-studied type.

To study strategic management is to begin to understand the nature of the organization itself, how it creates and responds to myriad and shifting external forces, and what it needs to accomplish if it is to survive and prosper. The course of higher education in times of change and scarcity will be determined largely by how well administrators and faculties understand strategic management. Fortunately, many administrators and faculty members are remarkably skilled in strategic management. But they need the kind of guidance that can arise from a strong basic and applied research program. The best of them want it; the others may sink without it. We have a model in the business literature, albeit an imperfect one, of how that program can be built. We need to become more aware of that literature and to develop the necessary sophistication to address the topic profoundly.

Regarding needed research methods, Schendel and Hofer (1979, p. 530) placed the following recommendation for business studies of strategic management at the top of their list:

Bases on which business typologies have been built, such as risk orientation, initiative, and leader attitude (see Table 4), may be helpful. Typologies that describe higher education organizational strategies could be used in hypothesis-testing research, perhaps using hypotheses borrowed from analogous business studies. Moreover, the business literature exhibits properties that the higher education literature needs, including grounding in theoretical frameworks, attending to conceptual as well as operational functions, and comparisons of multiple cases and their achievement of desired organizational outcomes.

A third research area concerns the applicability of the three models to higher education. One possibility is that the interpretive model provides a way to accommodate the unique characteristics of higher education organizations through its emphasis on perception, constituencies, motivation, and legitimacy. Numerous questions arise from this perspective. Is one model more applicable to higher education than others? If so, does the primacy of one model over the others vary according to the type of institution, the nature of the institution’s circumstances, or other factors? Are behaviors in all models mutually consistent? If so, is consistency more productive than inconsistency? Through what media and on what bases do constituents perceive and judge a strategy? What criteria do they use for granting legitimacy to a higher education organization? Shifting to the individual level of analysis, how do top executives form perceptions of the organization and of the environment? How do they translate those perceptions into decisions and symbolic representations? How do they rate and choose among alternative possible interpretations?

A fourth research area, related largely to adaptive strategy, is organizational change. To what degree do boundaries in higher education restrict change? Are there limits on the type or amount of change colleges and universities can make without jeopardizing their legitimacy? Business studies focus on changes in products, markets, and geography. Do higher education organizations have more subtle options for change that constitute potentially valuable strategies? For example, what about changes in key personnel, governance structure, physical facilities, marketing, extracurricular activities, or cultural activities?

A final research area that this review could not cover in the space available concerns the processes by which strategic decisions arise and are made. Frederickson (1983) describes where research is needed in this area for the business literature. Despite widespread availability of business literature on that topic, higher education strategy literature — both conceptual and empirical — has hardly broached the topic except in normative exhortations that are based either on "how we did it" or on a formal, perhaps unrealistic, version of rationalism and logic. Is strategy formulated in higher education organizations, or is it a by-product of interest-group negotiations? How does strategy move from the idea stage to implementation? Does implemented strategy bear any resemblance to intended strategy?

Regarding needed research methods, Schendel and Hofer (1979, p. 530) placed the following recommendation for business studies of strategic management at the top of their list:
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