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**DIVERSITY AND PERFORMANCE:
THE ELUSIVE LINKAGE**

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DIVERSITY AND PERFORMANCE:
THE ELUSIVE LINKAGE

Abstract

Previous studies of the relationships between diversification and performance, although valuable, have focused on "achieved performance" and not on how to improve performance. Furthermore, there is as yet no overall theory that links diversity and performance. The purpose of this paper is to propose a crucial linkage and to show how this linkage can add significantly to our understanding of performance in the diversified firm.

For the past thirty-five years product-market diversification of large firms has continued at a rapid pace. Today, over two-thirds of the firms in the U.S.A. Fortune 500 are highly diversified and similar patterns of diversification exist in Western Europe and Japan (Rumelt 1974, Pavan 1972, Thanheiser 1972, Pooley 1972, Channon 1977, Suzuki 1980). As a consequence, interest in the relationship between corporate diversification and financial performance has grown among practitioners, academics, and public policy makers.

Accompanying this interest has been a spate of research on the patterns of diversification and the determinants of performance in diversified firms by the academic community. Concurrently, consulting firms have been actively promoting a variety of approaches for managing diversified firms. The results of these efforts have been mixed at best. There is, as yet, no overall theory that links diversification with performance and the linkage, if any, remains elusive.

The purpose of this paper is to propose a crucial linkage, which has largely been ignored in the literature on the relationship between diversification and performance; and to show how this approach can add significantly to our managerial understanding in the diversified firm.

A BRIEF REVIEW OF RESEARCH ON DIVERSITY AND PERFORMANCE

The purpose of this section is to review briefly the major academic research streams and consulting frameworks relevant to the relationships between diversity and performance. Those readers unfamiliar with the area in general or interested in learning more about any specific topic should consult the references listed. While significant literature exists in support of each of

the streams of research outlined below, we will only reference and discuss the seminal works in each area.

The Strategy of Diversification

Pioneering work by Chandler (1962) and Ansoff (1965) established the motivations for diversification and the general nature of the diversified firm. Wrigley (1970) refined and extended Chandler's study by investigating the various options open to a diversifying firm. For example, a firm might expand into new areas linking technological or market characteristics of the new business to current activities, or, alternatively, it might diversify without regard to such relationships. Building on the work of Chandler, Wrigley, and others, Rumelt (1974, 1977) investigated the relationships among diversification strategy, organizational structure, and economic performance. His studies were based on a random sample of 246 firms drawn from the Fortune 500 during the period from 1949 through 1974. Rumelt used four major and nine minor categories to characterize the diversification strategy of firms. The major categories were single business, dominant business, related business and unrelated business. These categories provide a spectrum of diversification strategies from firms that remain essentially undiversified to firms that diversified significantly into unrelated areas. Using statistical methods, Rumelt was able to relate diversification strategy to performance. The related diversification strategies -- related-constrained and related-linked (e.g., General Foods and General Electric) were found to outperform the other diversification strategies on the average. The related-constrained was found to be the highest performing on the average. (In related-constrained firms most component businesses are related to each other, whereas in related-linked firms only one-to-one relationships are required.) By contrast, the unrelated

conglomerate strategy was found to be one of the lowest performing on the average.

Recently Nathanson and Cassano (1982) conducted a statistical study of diversity and performance using a sample of 206 firms over the years 1973-1978. They developed a two-dimensional typology for capturing diversification strategy that refines Rumelt's categories. On one dimension they measured market diversity and on the other dimension they measured product diversity. They found that returns (on the average) declined as product diversity increased while returns remained relatively steady as market diversity increased. However, they also found that size plays an important moderating role on the relationships. For both the market and product diversity, smaller firms did well relative to larger firms in categories marked by no diversification and in categories of extremely high diversification. Larger firms did significantly better than smaller firms in the in-between categories -- those characterized by intermediate levels of diversification.

In both these studies linking diversification and performance (Rumelt and Nathanson/Cassano) the key point to note is that choosing the generic strategy of diversification (how much and what kind of relatedness) is key to achieving performance.

Economic Characteristics of Individual Businesses

Few would argue that the characteristics of the various industries in which a firm participates and the position of the firm's businesses in these industries impacts overall firm performance. For an interesting and readable conceptual discussion of the influence of industry structure on performance see Porter (1980).

Two studies have in fact empirically validated these influences for diversified firms. The widely discussed PIMS program of the Marketing Science

Institute (see Schoeffler, Buzzell, and Heany, 1974, for an introduction) has shown that variables such as market share and relative product quality directly influence the profitability of constituent businesses in large diversified firms. More recently, Montgomery (1979) has examined the performance differences in diversified firms using the market structure variables of industrial organization economics. Montgomery found that diversified firms with higher levels of performance tended to have well positioned businesses in industries with "favorable" market structures. Specifically, she found that a diversified firm's profitability depended on the average concentration and profitability of the industries in which it participated and the firm's average market share within these industries.

In summary, for both studies (PIMS and Montgomery) the structure of the industries in which the firm competes and the competitive position of the firm's businesses within these industries are the key determinants of performance.

Portfolio Concepts

What are here called "portfolio concepts" go by various names such as portfolio grids, SBU concepts, and SBU matrices. The origin of these approaches is usually traced to the Boston Consulting Group, General Electric Company, and McKinsey and Company. Although there are numerous slight variations among the approaches used by various consultant groups and firms, they all rely on a matrix or grid with two axes. The matrix classifies businesses by product-market attractiveness, or some variant of it, along one axis and by competitive position or some variant of it along the other axis. Typically these matrices are divided into either four or nine boxes. (For a thorough discussion see Hofer and Schendel, 1978.) The position (box) that each business occupies represents its strategic position and determines the role that

the business should play in the corporate portfolio. This role involves varying degrees of cash generation or cash usage. Studies by Bettis (1979), and Haspeslagh (1982) suggest that managers use these concepts to varying degrees -- as a tool to a dogma -- in managing a diversified portfolio of businesses.

For each variant of the portfolio concept the key points are: (1) the strategic position of each business determines its desired cash flow characteristics; and (2) it is the "balance" of these cash flow characteristics that leads to overall performance of the diversified firm.

The Human Relations School

In addition to the streams of research discussed above, a number of studies focusing on performance in large firms by researchers concerned with organizational theory and human motivation, have appeared recently. These studies do not consider the problem of diversity as it affects performance in the large organization. Representative of this line of research these are Peters and Waterman (1982), Deal and Kennedy (1982), Pascale and Athos (1981) and Ouchi (1981). These studies often draw directly or indirectly on some of the approaches that are believed to have been significant in the development of successful Japanese firms. In all of these studies there is a great deal of emphasis on achieving a high and sustainable level of motivation among the entire management team and work force.

The four streams of research lead to somewhat different conclusions. To summarize, the linkage between diversity and performance would appear to be a function of:

Summary

1. The generic diversification strategy adopted by the firm, or
2. the quality of the individual businesses, as measured by the

competitive structure of the industry and the strength of that firm in that industry, or

3. the cash flow characteristics of the various businesses and the internal cash flow balance for the total firm, or
4. the corporate culture and the level of motivation of the employees -- the desire for excellence.

Undoubtedly, all the four perspectives provide partial answers to the question. The difficulty in using the results of the research streams outlined above arises from the following:

1. They focus attention on and document characteristics associated with 'achieved' performance, not on how to 'improve performance'. In other words, it is a static view.
2. They do not deal with the problems of 'how to diversify', but only on performance given a pattern of diversification.
3. They focus on performance measures like ROC, ROE, or cash flow, one at a time but not on performance of the business as a whole (including factors such as technology and product leadership, good community and government relations, people management, etc.). While we are very cognizant of the intractability of some of these performance measures and the difficulties in including them in a meaningful research design, we should however, recognize their managerial importance.

The Importance of "Quality of Management":

Bettis, Hall and Prahalad (1979) have argued that, if we moved away from the traditional research preoccupation with central tendencies, but focus on outliers -- the very high and very poor performers -- we may learn more about the elusive linkage between diversity and performance. (Peters and Waterman,

1982, represent this type of study. Unfortunately they did not explicitly address the problem of diversity nor couple the study of high performers with a study of low performers.) By studying just twelve firms, six of which were high performers and six low performers, across the three generic categories of dominant, related, and unrelated diversifiers (with a sample of four firms each, two in high and two in low performance categories), they concluded that the quality of management was as critical in explaining performance as any other factor. The study was not based on the large sample (and it could not be by design, as their concern was with outliers), and the conclusions were tentative. The real departure in the academic perspective on diversity and performance indicated by the study was the concern with very good and very poor performances in the same generic diversification category and the inclusion of importance of the quality of management as a major variable linking diversity and performance.

Two other studies indicate the importance of the quality of management in managing diversification. Ranjan Das (1981) studied one firm's attempt to diversify out of the core business (tobacco) and how it had to learn the process of general management in the new businesses into which it ventured. The conclusion was that it was not the quality of the businesses -- its competitive structure -- or the pattern of diversification per se that determined early failures and success later, but the evolution of the top management and its ability to acquire new skills and recognize that its approach to managing a diversified firm must be different from the way it had managed the single business firm. The study by Miles (1982) of tobacco companies in the US and their attempts to diversify away from tobacco, also leads to a similar conclusion. The firms had to learn as much about general management in the diversified firm, as a distinct process and skill, as the characteristics of

the new businesses. Both these studies indicate that the work of top management in diversified firms is a distinct skill and can contribute to the success or failure of anyone of the businesses within the firm or the firm as a whole.

The Management of a Diversified Firm

Studies of the work of top management and the process by which they manage a diversified firm are not numerous. Bower (1972) demonstrated that top managers influence the strategic choices made by unit level managers by orchestrating the organizational context -- the formal structure and systems. In other words, the tools of top management were administrative in character. Hammermesh (1977) outlined the process by which top managers intervene in a divisional profit crisis. Prahalad and Doz (1981) outlined, in detail, how top managers can use administrative tools to shift the strategic direction of a business. This line of research established both the broad scope of the work of top management, but more importantly on how that influences the strategic choices made by lower level managers at the business unit level, thereby impacting on the overall performance. There exists a logical, though not currently empirically verified link between the quality of management and the performance of the firm.

The two questions that we posed ourselves based on the literature were:

1. If top managers in single business firms had to learn the process of managing a diversified portfolio, should top managers in diversified firms go through a similar learning process when they add new businesses? Is the task of top management in the diversified firm dependent on or at least partially influenced by the underlying strategic characteristics of the businesses?

2. If the tools available to top managers in diversified firms to influence the strategic direction of businesses are essentially administrative as it affects the organizational context, does it follow that the substance of businesses are irrelevant? In other words, can the same context management capabilities suffice if the mix of businesses change?

These questions are motivated by the fact that current models that link diversity and performance do not shed light on issues like i) why do some 'obvious winners' fail?, ii) why do some 'obvious losers' succeed?, iii) what, if any, are the limits to the management of diversity?, and iv) how does an organization learn to cope with diversity?

We will provide some examples that illustrate the dilemmas faced by practitioners and researchers concerned with the diversity-performance linkage.

Examples of 'Obvious Winners' Losing

- Johnson and Johnson, with a diversified portfolio of drugs, toiletries, hygienic products, baby care products, and industrial products entered the disposable diaper business during 1973. The company was totally identified with baby care, and had an enviable distribution capability. However, by 1981, it exited the business, unable to sustain itself in the disposable diaper business. (Source: Johnson and Johnson Annual Reports, 1973, 1981.)
- Texas Instruments (TI), a leader in semiconductors, entered the digital watch business during 1975. The aggressive price cutting strategy followed by TI convinced several observers (Business Week, 1975) that TI would bring leadership in watches back to the US. However, it exited the business in 1980. (Source: Business Week, October 27, 1975.)
- Philip Morris, known as an aggressive marketer, acquired 7-Up during 1978. It paid, as it did with Miller Brewing, what was considered a high price (\$515 million, which was 20 times earnings). As of 1982, 7-Up had lost its market share from 6.6% in 1975 to 5.0% by 1982, in spite of the fact that Philip Morris had spent, by published accounts, at least \$60 million. However, Miller Brewing was considered a spectacular marketing (if not a

financial) achievement. Market share increased from 4.5% in 1971 to 21% in 1982. (Source: Mergers & Acquisitions, Fall 1978.)

- EMI, a British firm with a firm base in entertainment and defense electronics, was the first to develop a CT scanner during 1970. It was an instant success. By 1975-76, it was a world leader and had more than 70% market share in the US. Almost 40% of all radiological research papers presented at conferences in the US were based on EMI's CT scanner. However, by 1980, the firm had to exit the business. It was unable to exploit the excellent market position it enjoyed.

- American Can purchased Pickwick International, a firm involved in distributing records. Pickwick was a leader, the second largest in the US with a very profitable history. When it was acquired in 1977, for \$101.6 million, as part of American Can's strategy for moving into consumer businesses, it was very profitable. Within two years, there was significant profit and market share decline. (Source: Mergers and Acquisitions, Fall, 1977.)

- Heublein, a very successful liquor marketer, acquired Hamm Breweries, during 1965, for \$62 million. In spite of the extraordinary success of Heublein, Hamm was very unsuccessful. Hamm was divested for \$6-10 million, during 1973. Similarly, Heublein's acquisition of Kentucky Fried Chicken and Stouffers frozen foods, have not been spectacular successes. (Source: Heublein Case, 1966.)

These examples include diversification through internal development and acquisition, situations where technology or marketing synergy or both existed. The acquired businesses had very attractive market positions, and the acquiring firms were well known for the quality of management, as evidenced by their success prior to these acquisitions. Now to some counter examples ...

Examples of Obvious Losers' Winning

- General Electric ventured into financial services businesses in a big way, away from customer credit to industrial leasing. It was a totally "unrelated" activity -- by our current definitions of relatedness. However, the financial services business has become one of the fastest growing and most profitable of GE's businesses. As of 1982, GE credit accounted for 7.3% of GE sales and 11.3% of GE profit. (Source: GE 1982 Annual Report.)

- Rolm, a small manufacturer of defense computers, branched off into PBX market during 1973. At that time Rolm's sales were \$3.6 million. It challenged AT&T (AT&T's market share of PBX

was conservatively 12.5%), GTE and other such firms several times its size. By 1980, Rolm had gained 80% of PBX market share and was considered a leader. (Source: Rolm Corp., Stanford Business Case, 1979.)

- Honda, a firm with annual sales of a small fraction of General Motors, with primarily a position in motorcycles, entered the fiercely competitive auto-market, first in Japan in 1962 and in the US during 1971. While by all standards the auto-market was a (a) low growth, (b) capital intensive, (c) concentrated (dominated by GM and Ford), and (d) technology intensive, Honda was able to establish a secure and profitable position and even initiate US production by 1982.

We could enlarge the number of examples. Here are examples that, by existing theory, should have failed. Either they represented unrelated diversification, or the parent was cash starved, or the firm had to contend with a very unfavorable market structure. While these examples do not disprove existing wisdom, it certainly raises doubts on the adequacy of our models.

THE ELUSIVE LINKAGE

Based on our exploratory research, we find that most top managements operate with a single or a set of dominant general management logic(s). A dominant logic is the way management conceptualizes the business and makes decisions. In essence, it is the mindset and repertoire of tools that top management uses to identify, define, and make strategic decisions. These tasks of general management relate to resource allocation, control over operations, the ability to detect impending crisis or emerging potential, and the ability to intervene in a particular business to resolve a crisis. The tasks are performed by the use of administrative tools like planning, budgeting, rewards and punishment, career management, organization structure changes, etc. The dominant logic evolves because (see Exhibit 1) the traditional or largest business (i.e., the "core" business) tends to dominate the thinking and actions of top management. Top managers focus their energies on the tasks that

are critical for success given the characteristics of the core business. This in turn causes them to see problems in certain ways and to develop familiarity with and facility in the use of those tools that are particularly useful in accomplishing the critical tasks of the core business. In other words, the tasks critical for success in the core business tends to establish top management's mindset and repertoire of tools. This mindset and repertoire of tools then furthers a focusing effect on those particular characteristics of the core business that define the critical tasks for success. Often, top managers confronted with wide differences in the demands of businesses tend to group them, under a group or sector management, based on strategic similarities among the businesses so grouped. The examples of General Electric Company and Textron, indicate that the dominant logics required of businesses within a sector or a group tend to be similar. They may be quite dissimilar across sectors. In other words, while the dominant logics across businesses may be quite varied, firms like GE effectively reduce the variety by grouping similar businesses together, thus limiting, for all practical purposes, the variety at the top management level. Further, strategic direction of specific businesses tend to be managed at the sector level, which represents a collection of business with similar strategic logics.

The need to change the dominant logic may arise from two distinct forces: the acquisition or development of a new business with a different dominant logic or the rapid changes in the structure of the core business (see Exhibit 2). This paper focuses primarily on the first of these forces -- addition of new businesses. However, much of the argument is equally applicable to rapid changes in the structure of the core business. Interestingly, the authors believe that because of the rapid pace of change in the competitive milieu (e.g., technological advance, globalization, and increasing government

intervention in many countries) many large companies are currently forced to cope with changes in dominant logics. Consider, for example, General Motors and the US auto industry. With dramatic structural changes occurring in the auto industry, (globalization, market share shifts, emergence of stringent regulations on emissions, safety, fleet mileage requirements, and joint ventures), the mindsets required to manage the firm tend to be quite different from those which led to success during the 60's and early 70's.

In the case of US Steel, the firm has to cope not only with the dramatic shifts taking place in the steel industry worldwide, but at the same time cope with the need to integrate Marathon Oil, an acquisition outside its core business, and a business with entirely different industry characteristics and strategic imperatives. Moreover, the oil industry was also undergoing structural change as of 1981-1982. US Steel had to, therefore not only cope with the new dominant logic forced by changes in the steel industry, but at the same time understand and cope with those imposed by its acquisition of Marathon Oil.

When a top management acquires or internally develops a new business, the dominant logic required of that business may correspond with the logic of the existing businesses. Some firms operate with a single dominant logic (e.g., General Motors) and some others with multiple dominant logics (e.g., General Electric). If the new business does not correspond to the existing dominant logic(s) of the firm, a new logic has to be developed, i.e., the top management has to create an organizational and administrative basis for learning the unique needs of that business and ensuring that it will not be subject to the same logic that may have worked in existing businesses. In other words, top managers must ask themselves, in addition to the financial, technological and marketing "fits" of the new business, whether it fits the dominant logic(s)

currently used by them. This need for identifying and classifying businesses is captured in exhibit 3. If the new business falls in cell (A) then there is no need to reexamine the processes of management within the firm. However, if it does not, and falls into cell (B), then, top managers will have to establish a differentiated basis for dealing with that business. IBM, for example, created an independent business unit (IBU) to handle the Personal Computer business and even geographically separated it. However, once top managers felt that it had taken root, they moved it back into the mainline of IBM's business.

If the business falls in cell (C), then the task of top managers is to identify and group that business with other businesses, within the firm, using similar strategic logic. This will be the equivalent, in General Electric or 3M of assigning it to a sector. However, if it falls into cell (D), then, it may merit the same separate treatment as in cell (B).

The Importance of Key Individuals:

Implicit in our discussion of dominant logic so far is the role of top management. We view top management not as a "faceless abstraction" but as a collection of key individuals. The mindsets, the repertoire of skills, the ability to read and adapt to weak signals, the determinants of the dominant logic(s), an organization is capable of, is in essence the variety that key individuals (and a coalition of individuals) can cope with in a large organization. There is a significant body of research in psychology and artificial intelligence that we can draw on to understand how an individual's capabilities to solve complex problems are developed.

We have categorized the streams of research into two groups — the processes by which reinforcement of a world view takes place and the processes of complex problem solving. The framework used is shown in exhibit 4. We will

briefly examine the various streams of research to explicitly deal with the sources of dominant logic used by a top manager.

The Sources of Dominant Logic

We identified four streams of research - operant conditioning, paradigms, cognitive biases, and artificial intelligence - that collectively may help us understand the various facets of dominant logic and how top managers can expand their repertoire of skills.

Skinner (1953) in his seminal work on operant conditioning, argued that behavior was a function of its consequences. Behavior could be understood by considering the contingencies that were administered by the environment in response to certain behaviors. Behavior that was reinforced was emitted more frequently in the future. By contrast, behavior that was ignored or punished (negative reinforcement) was likely to diminish over time. A dominant logic can be seen as resulting from the reinforcement that results from doing the "right things" with respect to a business. In other words, when top managers effectively perform the tasks that are critical for success in the core business they are positively reinforced by economic success. This reinforcement results in their focusing effort on the behaviors that led to success. Hence, they develop a particular mindset and repertoire of tools. This in turn determines the approaches that will be taken to resource allocation, the detection of impending crisis or emerging opportunity, control over operations, and the approach to intervention in case of crisis or unexploited opportunity. Consider what happens, however, if the firm acquires or develops a business for which the critical tasks for success are substantially different from those in the core business. Here, because of operant conditioning the emitted behaviors are likely to remain those that are appropriate for the core business even though they may be inappropriate in the new business. In other

words, it will be difficult for a top management group to be effective when a new dominant logic is required. The problems faced by American Can and Exxon in managing acquisitions of businesses totally different from their core businesses, in the early stages, is an illustration of the power of operant conditioning on top management.

The concept of dominant logic also derives direct support from Kuhn's (1970) work on scientific paradigms and Allison's (1971) work on the importance of alternate paradigms in the context of analyzing government actions during the Cuban Missile Crisis.

Kuhn, a historian of science, argued that a particular science at any point in time can be characterized by a set of "shared beliefs" or "conventional wisdom" about the world that constitutes what he called the "dominant paradigm." What Kuhn calls "normal science" is carried out efficiently under this set of shared beliefs. In a sense, Kuhn's "paradigm" is simply a way of defining and managing the world and a basis for action in that world. It specifies what is a legitimate part of the science and what are legitimate approaches to doing science. Kuhn points out how difficult it is to shift dominant paradigms and illustrates this with several examples such as the shift from the Ptolemaic view of the universe (earth centered) to the Copernican view of the universe (sun centered) in astronomy. The analogy from science to a business firm is simple and direct. The dominant paradigm and the dominant logic are conceptually similar but employed in different fields.

Allison used paradigmatic analysis to show how the adoption of a particular paradigm powerfully effects our evaluation of events. He characterized a paradigm as "a systematic statement of the basic assumptions, concepts and propositions employed by a school of analysis." Different paradigms resulted in dramatically different analyses of his chosen example: the Cuban missile

crisis. The parallel between Allison's use of the word paradigm and our use of dominant logic is obvious.

As part of the development of "intelligent" computer programs there have been numerous efforts to develop chess playing programs. (See Newell and Simon, 1972, for a review.) Inevitably such research has required intense studies of how chess experts make decisions in a chess game. In particular, the decision making and problem solving of grandmasters and masters has been compared to that of lesser player (de Groot, 1965). These studies have shown that the better players could remember more "patterns" of previous games than the lesser players. Simon, (1979) estimated that class A players could remember about 1300 familiar patterns while masters or grandmasters remember about 50,000. This "vocabulary" of previous games lets players make effective decisions by comparison with earlier games. In other words, chess players decide on the basis of experience or "what worked before," not on the basis of some best strategy or optimizing procedure. Now consider a situation where the design of the gameboard or rules of chess are changed. The stored "vocabulary" of games is no longer as useful in this new game. Similarly, when the economic gameboard or rules are changed by a diversification move, the vocabulary of economic moves stored through experience in the core business is no longer as useful. In other words, solutions based on "past experience" or solution by "analogy" may be inappropriate.

A final area from which research results are suggestive of the concept of a dominant top management logic is cognitive psychology. The psychology of cognitive biases is the study of how people in making decisions sometimes make systematic (and often severe) errors (See Tversky and Kahneman, 1974, for an introduction and survey). When dealing with uncertain and complex tasks people often rely on a limited number of heuristic principles which greatly

simplify the decision process. In general, these heuristics are useful, but on some occasions they can result in significant errors.

For present purposes the most interesting of these heuristic principles is what is called the availability heuristic. (See Tversky and Kahneman, 1973, for a thorough discussion.) Basically, the availability heuristic leads people to make decisions by using information that can easily be brought to mind (i.e., information that is "available"). This often leads to severe and systematic errors. This field of research also suggests that decision makers do not necessarily use analytical approaches to evaluate the information content of available data or search for "adequate information" (Nisbett and Ross, 1980). For example, Tversky and Kahneman (1974) point out that one may assess the risk of heart attack among middle-aged people by recalling such occurrences among one's acquaintances even if it can be shown that it is an inappropriate basis for drawing such a conclusion. Obviously, for top managers, knowledge of the core business and the business they are most familiar with will be a significant source of available information. They tend to apply it to other businesses where it may or may not be appropriate (Das, 1981). Research on cognitive processes suggests that the mindset and repertoire of tools that constitute the dominant logic are likely to be inappropriately applied by managers confronted with a "different" business and that there is significant "learning" that precedes change in those biases. The difficulty of operating in diverse businesses which require multiple dominant logics is obvious.

We have so far argued that a key determinant of successful diversification -- be it through acquisition or internal development -- is the fit between the dominant logic that the new business demands and the logic(s) that the top management of a diversifying firm is capable of. In other words,

central to our view of the determinants of high performance in a diversified firm, are the following ideas:

- i) the ability of a top management group to accept the need for grouping businesses based on strategic similarities (as distinct from technical or market similarities) and create the capabilities to manage them differently.
- ii) The recognition that a dominant coalition of top managers influence the dominant logic(s) of the organization. This implies that the capabilities of a firm to cope with diversity may be restricted or enhanced by the quality of the top management team. The composition of that team may be critical.
- iii) The recognition of the importance of key individuals. As an individual, the variety of dominant logic(s) that a manager is capable of is a function of his past experiences (i.e., the number and patterns of moves he can recognize), as well as his career path to top management and the reasons he perceives for his success (i.e., operant conditioning). While these two factors determine the range of logics he can cope with, dependence on conventional wisdom (i.e., paradigms) in contrast to the ability to use varied analytical approaches and ability to tap a wide variety of sources of data to cope with substantive and organizational problems (i.e., cognitive biases) may limit his ability to expand his skills. The implication is that the more varied the backgrounds of top managers, less are the chances that they will depend on a singly dominant logic. Further, the greater the desire of key managers to expose themselves to new sources of data as well as new analytical approaches (a learning orientation), less is the danger of a single dominant logic being applied across dissimilar businesses.

The composition of the top management team and how it copes with diversity, we believe, is an important determinant of performance. Top managers can restrict diversity by opting out of some opportunities in the interest of a "focus" or expand their skills and capabilities to accommodate a "wider variety."

CONCLUSIONS

The concept of dominant strategic logic and the role of top managers in understanding and managing the logic(s), are important aspects to be

considered in the research on diversity and performance. There are several implications of including the concept of dominant strategic logic in the study of diversity and performance. We will list some:

1. Limits to Diversity:

We have argued that the "real diversity" in a firm does not arise from the variety in technologies or markets per se but from the strategic demands the businesses impose on top management -- or the variety in dominant logics. Further, the variety of dominant logics that a top management can handle depends on the composition of the team, their experiences, as well as their attitude toward learning. These factors suggest that we ought to recognize that the limit to the diversity of businesses within a firm is determined by the strategic variety and that the strategic variety that a firm can cope with is dependent on the composition of a top management team. In other words, each top management team, at a given point in time, has an inbuilt limit to the extent of diversity.

2. Diversity and Performance:

A high level of performance in a diversified firm requires the ability to "respond fast" to competitor moves as well as "respond appropriately." One of the implications of our thesis so far, is that top managers are less likely to "respond appropriately" to situations where the dominant logic is different as well as not respond quickly enough as they may be unable to interpret the meaning of information regarding unfamiliar businesses. The "hidden costs" associated with diversifying into unfamiliar businesses is shown schematically in exhibit 5. These "hidden costs" are not explicitly recognized when the overall business climate is very favorable. The problems surface when the newly acquired businesses (which are strategically dissimilar) encounter competitive problems or are

faced with a profit crisis. Top managers find themselves unable to respond to the crisis (Hammermesh, 1977).

3. Improving Performance in Diversified Firms:

The prescription for improving performance in diversified firms follows two distinct routes. One, top managers may have to reduce the strategic variety in the businesses within the firm -- what has come to be known as "focus" in the portfolio. Secondly, top managers may attempt to enhance their skills and enlarge the range of dominant strategic logic(s) they are capable of coping with. This process raises questions such as "how fast" and "by what means."

4. The Meaning of "Relatedness:"

The concept of related or conglomerate diversification was typically based on an analysis of the technological and market characteristics. The view presented here suggests that we may have to develop a concept of relatedness based on the "strategic similarities" of businesses coupled with the unique capacities associated with a specific top management team, to manage a variety of dominant logic(s). This view of "relatedness" is not totally independent of the top management team in a diversified firm.

The relationship between diversity and performance remains elusive. Explicitly recognizing and incorporating the concepts developed in this paper, may help our understanding of this linkage.

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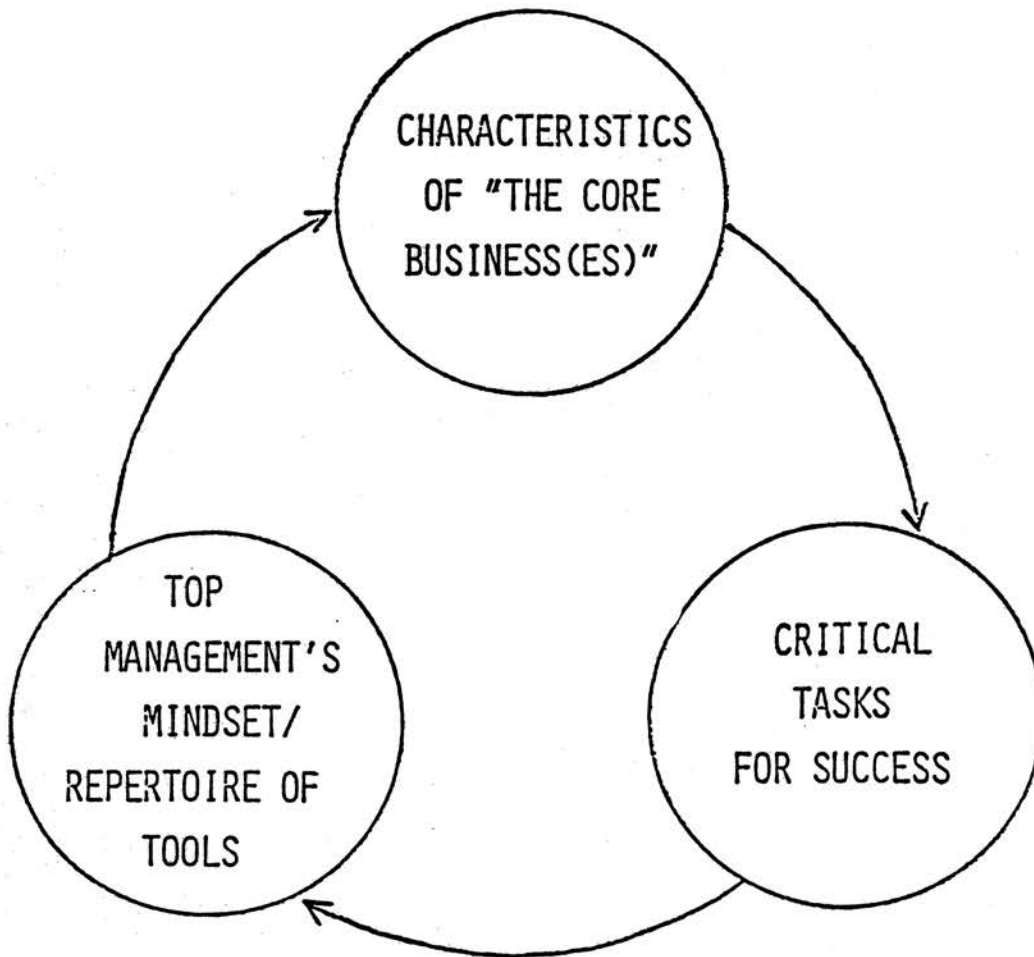


EXHIBIT 2

CHANGES TO DOMINANT LOGIC ARISES FROM
TWO DISTINCT FORCES:

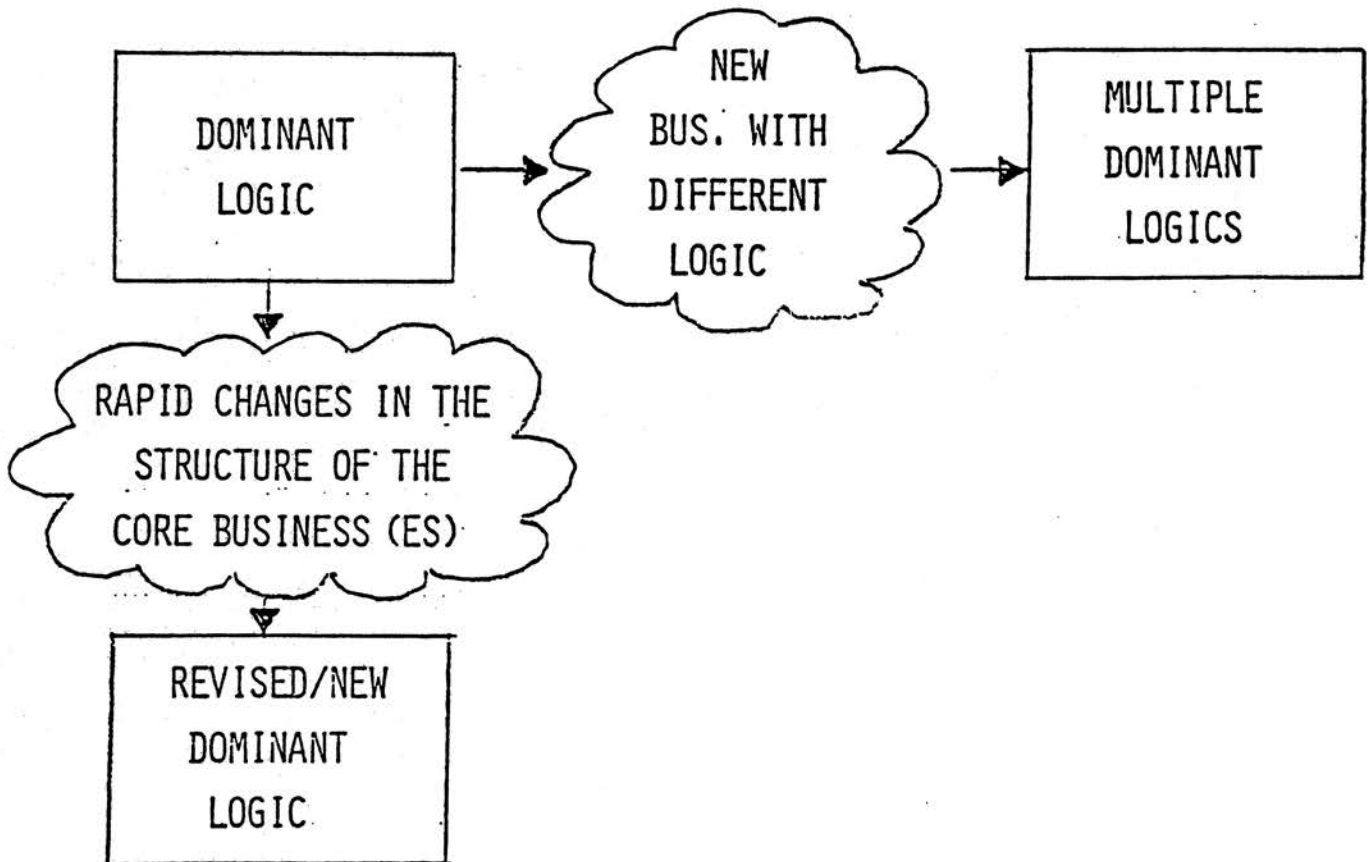


EXHIBIT 3

THE NATURE OF TOP MANAGEMENT TASK CAN BE CAPTURED
AS FOLLOWS:

	SINGLE DOMINANT LOGIC	MULTIPLE DOMINANT LOGICS
NEW BUSINESS CORRESPONDS	A	C
NEW BUSINESS DOES NOT CORRESPOND	B	D

EXHIBIT 4

CONCEPTUAL FOUNDATIONS
OF
DOMINANT LOGIC

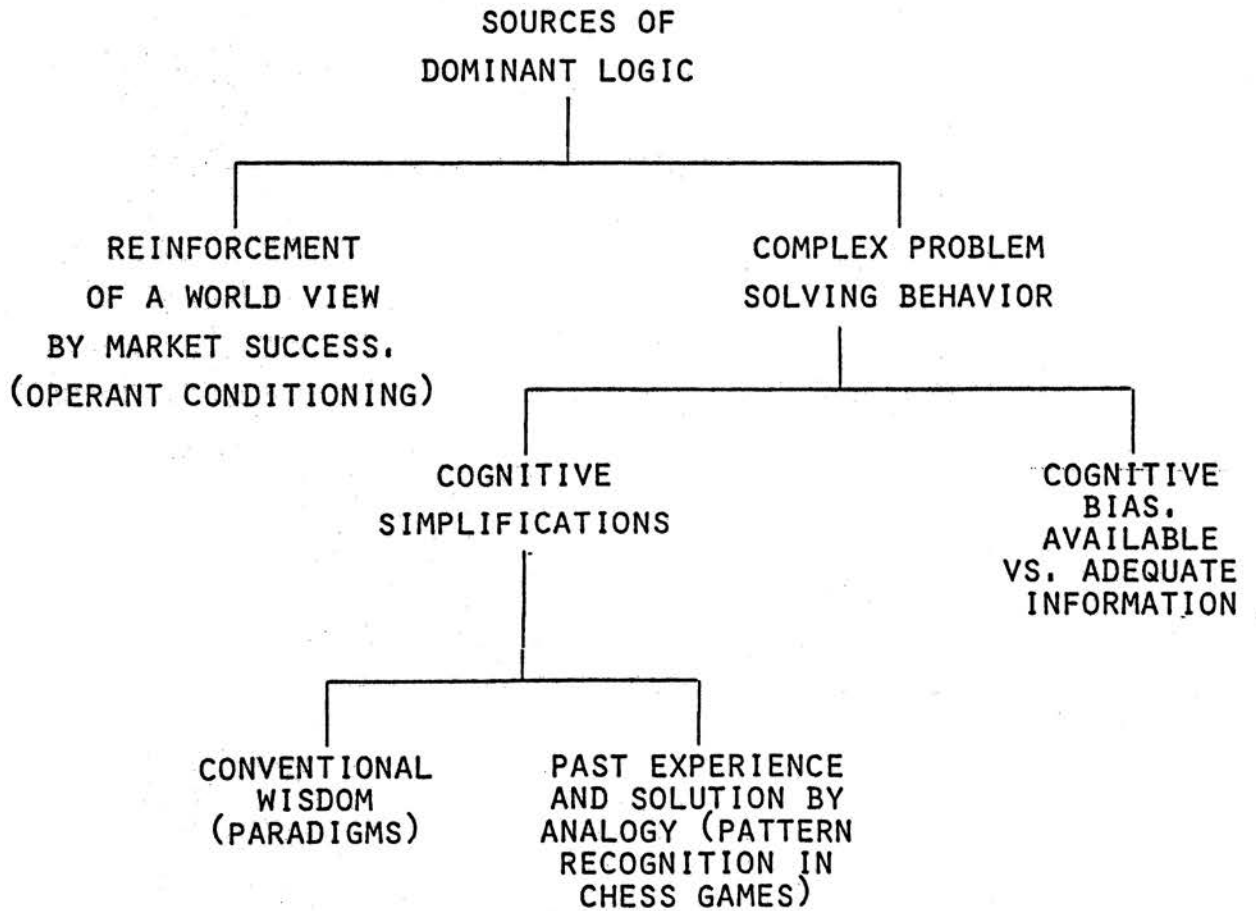
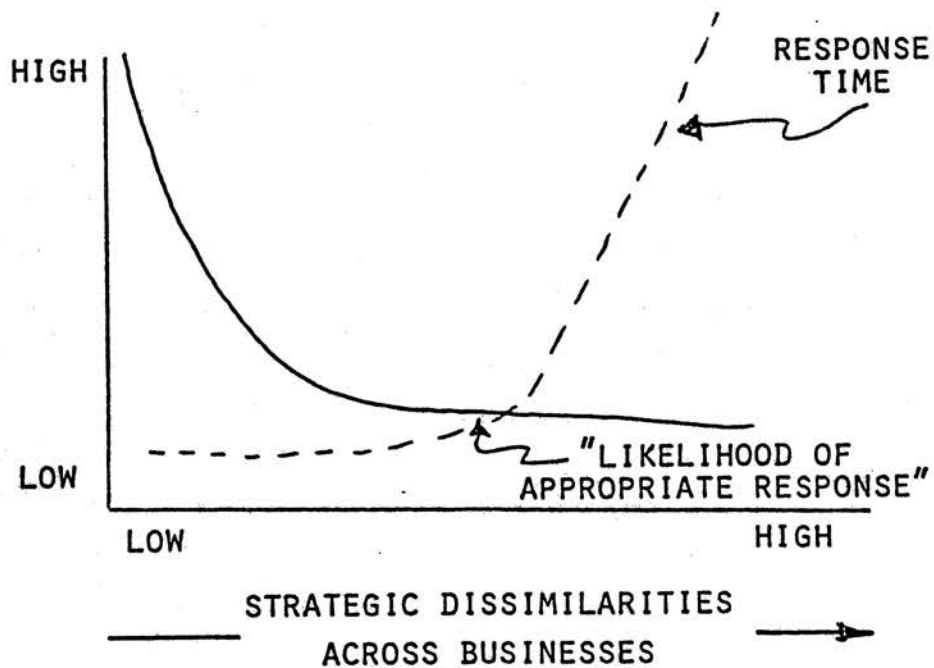


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