Competitive Strategy Research

Current Challenges and New Directions

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Abstract

Although much has been learned about competitive strategy over the past several decades, critical challenges remain. Given the recent development and restructuring of the "new economy," a reassessment of the strategy construct, the measurement of business performance, and the link between research and practice is germane. Recommendations are proposed for new research directions in the field.

Keywords: Industrial Organizations, Strategic Group, Competitive Strategy Typology, Resource-based Theory, Businesses Strategic Classification, Managerial Consensus, Performance Measurement

The strategic management literature is replete with strategy typologies, research methodologies, and theories on the strategy-performance relationship (Dacko & Sudharshan, 1996; Mauri & Michaels, 1998). Nonetheless, research has been plagued by a variety of conceptual and empirical problems that can lead one to question the direction in which current research is headed (Ketchen, Combs, *et al*, 1997). This paper outlines the major conceptual and empirical challenges facing competitive strategy researchers and provides suggestions for overcoming them. Following an historical overview of the competitive strategy literature, empirical challenges and new directions for research are presented.

The Emergence of Strategic Management

Strategy is both ubiquitous and ambiguous. Researchers and practitioners agree that strategies exist at corporate, business, and functional levels within organizations. Identifying the content of these strategies, however, has proven to be an elusive task. An historical examination of the development of strategic management as a field serves to illuminate the basis of many of the problems in the field.

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Industrial Organization (I/O) and Strategic Groups

The roots of contemporary business strategy research can be traced to—among other traditions—industrial organization theory. Within Bain's (1956) and Mason's (1939) I/O framework of industry behavior, firm profitability is viewed as a function of industry structure. Characteristics of the industry—not the firm—are viewed as the primary influences on firm performance (see also Barney, 1986c). More recently, Bain and Mason's basic structure-conduct-performance model has been posited as most appropriate for industries with uncomplicated group structures, high concentration, and relatively homogeneous firms (Seth & Thomas, 1994). Early strategy researchers challenged the I/O perspective, noting its inability to explain large performance variances within a single industry. As a result, the strategic group level of analysis was proposed as a compromise between the deterministic industry level of analysis proposed and developed by industrial organizational economics and the firm or business level of analysis studied by strategic management researchers (Hergert, 1983; Porter, 1981).

Strategic groups describe apparent clusters of firms that exhibit similar or homogeneous behavior within a somewhat heterogeneous industry environment (Fiegenbaum, McGee, & Thomas, 1988). Theorists have proposed at least three rationales for the existence of strategic groups (Fiegenbaum, McGee, & Thomas, 1988). First, differing goals (i.e., profit, revenue, or growth maximization) among industry players lead to different competitive approaches. In addition, firms with similar goals may attain them through different strategies. Second, firms make different assumptions about the future potential of the industry, and are thereby affected differently by changes in the external environment. Third, skills and resources vary among competitors. Following this logic, it is reasonable to assume that there may be at least several "groups" of businesses, each with common goals, similar resources, and shared assumptions.

Strategic group research has demonstrated group-performance linkages in the brewing (Hatten & Schendel, 1977; Hatten, Schendel, and Cooper, 1978), chemical process (Newman, 1973), consumer goods industries (Porter, 1973), paints and allied products (Dess & Davis, 1984), industrial products (Hambrick, 1983), U.S. insurance (Fiegenbaum & Thomas, 1990), and retail mail-order (Parnell & Wright, 1993) industries, among others. However, not all studies have supported a strong association (McGee & Thomas, 1986, 1992). Meta-analysis by Ketchen *et al* (1997) found that only about eight percent of firms' performance can be explained by strategic group membership. Katobe and Duhan (1993) identified three strategy clusters among Japanese businesses—"brand skeptics, mavericks, and true believers"—and found that membership in one of the groups was not a significant predictor of performance. Rather, the link between strategy and performance was moderated by organization situational variables such as the degree of emphasis on manufacturing and profitability. Additional studies have also examined variables thought to moderate the strategic group-performance relationship (Davis & Schul, 1993; Zahra, 1993).

Competitive Strategy Typologies

As strategic group assessments identified clusters of businesses employing similar strategies, researchers were beginning to categorize similarities within the strategic groups across studies. Business strategy typologies identifying several generic strategic approaches were developed and utilized as a theoretical basis for identifying strategic groups in industries. Although strategic groups are an industry-specific phenomenon, many strategic group researchers began to utilize approaches believed to be generalizable across industries, specifically those proposed by Porter (1980, 1985, 1987) and by Miles and Snow (1978, 1986).

According to Porter's framework, a business can maximize performance either by striving to be the *low cost* producer in an industry or by *differentiating* its line of products or services from those of other businesses; either of these two approaches can be accompanied by *a focus* of organizational efforts on a given segment of the market. Miles and Snow's (1978) framework identified four strategic types: prospectors, defenders, analyzers, and reactors. Prospectors perceive a dynamic, uncertain environment. They maintain flexibility and employ innovation to combat environmental change, often becoming the industry designers (Miles & Snow, 1986). In contrast, *defenders* perceive the environment to be stable and certain, and thus seek stability and control in their operations to achieve maximum efficiency. *Analyzers* stress both stability and flexibility, attempting to capitalize on the best of both of the preceding strategic types. *Reactors* lack consistency in strategic choice and perform poorly.

Although attempts have been made to further develop both typologies, the original versions of the typologies appear to remain the most widely cited and tested (Eng, 1994; Wright, Kroll, Pringle, & Johnson, 1990). Considering Porter's model, Miller's (1986) suggested two different types of differentiation strategies. One type – intensive image management – highlights the creation of a positive image through marketing techniques such as advertising, market segmentation, and prestige

pricing. The second type – product innovation – involves the application of new or flexible technologies as well as unanticipated customer and competitor reactions (Miles and Snow, 1978; Miller, 1988; Miller and Friesen, 1984; Scherer, 1980).

While many researchers were utilizing and/or extending one typology or the other in their strategy-performance studies, others were seeking common theoretical ground for combining the two approaches into a single, all-encompassing typology (Kotha and Orne, 1989). Indeed, a comparison between the two typologies suggested that strategic types within both classification schemes could be categorized along the two dimensions of consistency and proactiveness. For example, differentiation and prospecting strategies tend to emphasize proactivity, while cost leadership and defender strategies are more reactive. Segev (1989) noted that Miles and Snow's reactor type may also be equated with Porter's "stuck in the middle" (1980, p. 41) type as strategies that lack consistency. Miller (1987) emphasized four integrated types: innovation, market differentiation, breadth, and cost control. Chrisman, Hofer, and Boulton's (1988) framework considers differentiation, scope, and competitive methods.

Resource Based Theory

Dissatisfaction with the I/O overtones inherent in strategic group analysis may have been the primary impetus for a renewed interest in firm resources, (not strategic group membership) as the foundation for firm strategy (Barney, 1991; Collis, 1991; Grant, 1991; Lawless, Bergh, and Wilstead, 1989). The resulting paradigm, resource-based theory, drew from the earlier work of Penrose (1959) and Wernerfelt (1984) and emphasized unique firm competencies and resources in strategy formulation, implementation, and performance. Resource-based proponents have studied such firm-level issues as transaction costs (Camerer & Vepsalainen, 1988), economies of scope, and organizational culture (Barney, 1986a, 1991; Fiol, 1991). Key business-level issues include the analysis of competitive imitation (Rumelt, 1984), informational asymmetries (Barney, 1986b), causal ambiguities (Reed and DeFillippi, 1990), and the process of resource accumulation (Dierickx and Cool, 1989).

Resource-based theory challenges three key tenets of the industrial organization approach. First, I/O assumes that firm profitability is primarily a function of industry profitability. Although this view recognizes the roles played by a variety of industry-level factors such as entry and exit barriers, it does not account for a firm's ability to redefine an industry or substantially influence its structure, even to the extent that it has no direct competitors. Resource-based theorists contend that the ability of a firm to develop and utilize valuable resources is the primary determinant of its performance.

Second, resource-based theory is inconsistent with the widespread application of strategic groups. According to I/O theory, just as industries may be identified based on similarities shared by its members, strategic groups within the industry can be defined based on strategic commonalties shared by their members. Indeed, the notion of strategic groups is intuitively appealing and emphasizes the similarities among groups of businesses in an industry. By maintaining a group level of analysis within the industry, I/O researchers seek to identify appropriate strategies by comparing the performance levels of the strategic groups.

In contrast, resource-based theorists have challenged the very existence of strategic groups. Some charge that all strategic groups are merely an artifact of empirical research, whereas others suggest that they may exist in some industries, but not in others (Barney and Hoskisson, 1990). Further, emphasis on the strategic group level of analysis de-emphasizes the uniqueness of businesses in a given industry.

Third, there are key differences concerning the control of valuable resources. I/O theorists contend that information is perfect in the long run, and that any short-run heterogeneity among businesses within an industry will be eliminated as competitors purchase valuable resources at the

strategic factor markets (Barney, 1986b). Recognizing that all firms have common access to a common body of resources, the I/O approach does not become mired in an attempt to measure intangible resources believed to be transitory.

In contrast, the resource-based perspective recognizes that businesses within an industry or strategic group may control heterogeneous resources, and that heterogeneity may be sustained over time. Both industry structure and firm control over resources are dynamic. As such, resource-based theorists do not see the expectational and information asymmetry (i.e., perfect strategic factor markets) that must exist in the traditional (I/O) paradigm as realistic (Barney, 1986b). They contend that firm resources include all assets, capabilities, organizational processes, firm attributes, information, and knowledge controlled by a firm, some of which may be intangible and/or difficult to measure, that enable it to conceive of and implement successful strategies.

A firm's resources may include physical capital resources (technology, plant, equipment, geographic location, access to raw materials), human capital resources (training, experience, judgment, intelligence, relationships, insights, and overall quality of managers and employees), and organizational capital resources (planning, controlling, and organizing systems). To the resource-based theorist, ignoring firm-specific resources believed to be transitory, so that researchers can incorporate a static approach to investigating firm profitability, substantially reduces the precision of the analysis and is therefore unjustified. However, accepting the transitory nature of resources that lead to competitive advantage further complicates the research process for the resource-based theorist (Dess, Gupta, Hennart, and Hill, 1995; Feurer and Chaharbaghi, 1994; Robins and Wiersema, 1995).

The nature of competitive advantage began to take renewed prominence within the new perspective. From the resource-based perspective, competitive advantage occurs when a firm is implementing a value creating strategy that is not simultaneously being implemented by any current or potential competitors (Peteraf, 1993). Sustained competitive advantage exists when competitors are unable to duplicate the benefits of the strategy (Barney, 1991).

Emergence of the "New Economy"

The rise of the Internet has resulted in pronounced changes in the strategic management process. The internet has provided a new channel of distribution, a more efficient means of gathering and disseminating strategic information, and a new way of communicating with customers. The most fundamental change, however, concerns the dramatic shifts in organizational structure, and their influences on viable business models.

During the past two decades, organizations have engaged in a process of disaggregation and reaggregation (Malone and Laubaucher, 1998; Tapscott, Ticoll and Lowy, 2000). The economic basis for this transformation was proposed by Nobel Laureate Ronald Coase (1990) in what is now referred to as Coase's law: "A firm will tend to expand until the costs of organizing and extra transaction within the firm become equal to the costs of carrying out the same transaction on the open market." In other words, large firms exist because they can perform most tasks—raw material procurement, production, human resource management, sales, and so forth—more efficiently than they would otherwise be performed if they were outsourced to the open market. Recent technological advances, most notably the development of the internet, have reduced the costs of these transactions. As a result, progressive firms place less emphasis on performing all of the required activities themselves, and form partnerships to manage many of the functions that were previously handled in-house. Hence, it is not uncommon for a number of strategic activities to be performed and managed outside of the firm.

A number of critics have challenged the notion that "new business models" are needed to compete in the "new economy". For example, Michael Porter noted that "many of the pioneers of Internet business.... have competed in ways that violate

nearly every precept of good strategy. .... By ignoring strategy, many companies have undermined the structure of their industries.... and reduced the likelihood that they or anyone else will gain a competitive advantage" (Porter, 2001). In essence, Porter and others have argued that the market forces that governed the traditional economy have not disappeared in the internet economy.

In addition to the movement toward disaggregation and reaggregation, the internet has a number of characteristics closely associated with the strategic management process, the effects of which tend to be industry-specific. Five strategic dimensions of the internet are worthy of discussion. First, the internet has created a movement toward information symmetry, a state whereby all parties to a transaction share the same information concerning that transaction. Information symmetry is an underlying assumption of the economics-based models of "pure competition," and is the primary reason why many markets that might otherwise tend toward pure competition remain marginally competitive.

Second, the internet acts as a distribution channel for non-tangible goods and services. Consumers can purchase items such as airline tickets, insurance, stocks, and computer softwares on-line, without the necessity of physical delivery. For largely tangible goods and services, businesses can often distribute the "intangible portion" on-line, such as product and warranty information.

Third, the internet offers numerous opportunities to improve the speed of the actual transaction, as well as the process that leads up to and follows it. Consumers and businesses alike can research information 24 hours a day, and orders placed on-line may be processed immediately. Software engineers in the U.S. can work on projects during the day and then pass their work along to their counterparts in India who can continue work while the Americans sleep.

Fourth, the internet provides extensive opportunities for interactivity that would otherwise not be available. Consumers can discuss their experiences with products and services on bulletin boards or in chat rooms. Firms can readily exchange information with trade associations that represent their industries. Users can share files with a click of a mouse.

Finally, the Internet provides many businesses with opportunities to minimize their costs – both fixed and variable – and thereby enhance flexibility. Information can be distributed to thousands or millions of recipients without either the expense associated with the mail system or the equipment required to do so.

These five strategic dimensions have fundamentally altered the nature of competitive advantage and the process of developing it. In many cases, top managers are openly challenging the traditional notion of strategy and seek to "violate the rules" in an effort to foster uniqueness and superior performance.

New Directions: The Conceptual Challenges

In its simplest form, the I/O-resource-based theory debate can be reduced to a single question: Are organizational factors more (or less) important than industry factors in determining firm performance? Henderson and Mitchell (1997) suggest that attempting to answer this question may be a fruitless exercise, since organizational capabilities, competition, strategy, and performance are fundamentally endogenous. In a similar vein, McGahan and Porter (1997) found that industry accounted for 19 percent of variance in profitability within specific SIC categories, and that this difference varied substantially across industries. Powell (1996) suggested that industry accounts for between 17 and 20 percent of performance variance (see also Rumelt, 1991; Stimpert and Duhaime, 1997). Hence, *both* sets of factors are important, and research should proceed based on this assumption.

Any attempt at building on the merits of both the I/O and resource-based perspectives must account for the varying degrees of influence of both industry factors and firm resources on performance (Roquebert, Phillips and Westfall, 1996).

Although past approaches aimed at expanding or integrating the original typologies proposed by Porter and Miles and Snow represent useful strategy frameworks, they do not account for different perspectives on the viability of combination strategies or the role of industry in business performance. The influence of industry on performance appears to be greatest when businesses choose to *adapt* to existing conditions rather than attempt to *influence* them. Specifically, strategies that emphasize adaptation enhance industry's role, whereas those that emphasize enactment minimize it. In industries where strategic groups may exist, businesses choose whether or not to join them.

Following resource-based theory, a business may, *given the proper array of resources*, succeed by implementing any single strategy in the framework or any combination of strategies. However, following the I/O model, some combinations appear *more likely* to be effective than others, and such combinations may be common in a given industry, thereby forming strategy groups. For example, first-movers may be most likely to also develop perceived uniqueness, but less able to emphasize production and distribution efficiencies. In contrast, segment controllers may be well equipped to emphasize efficiency but not uniqueness. Previous research has focused predominantly on combinations of the uniqueness and efficiency strategies (i.e., differentiation and low cost), perhaps one of the least attractive combinations in the framework. Additional research may develop taxonomy of combination strategies.

The industry-level of analysis should not be discarded in an attempt to better comprehend the business strategy-performance relationship (Zahra and Pearce, 1990). Indeed, the two perspectives can be complementary and are both necessary for a holistic perspective. For example, recent studies (e.g., Dooley, Fowler and Miller, 1996; Miles, Snow and Sharfman, 1993) have concluded that high strategic heterogeneity positively influences the overall profitability of an industry. Although these investigations have occurred at the industry level of analysis, implications for the business level are clear. Simply stated, the strategy-performance relationship may be moderated by the strategies implemented by one's competitors. Hence, industry-level studies such as these continue to increase the wealth of knowledge about individual firm strategies and performance.

New Directions: Empirical Challenges

Three new empirical directions are proposed: strategic classification of businesses, managerial consensus, and measurement of performance.

Strategic Classification of Businesses

The application of any business strategy framework must allow for valid and reliable measurement if it is to contribute to an understanding of strategy's influence on performance. There are three primary means of identifying competitive strategies. First, researchers can infer the strategy from accounting data. This approach assumes that a firm cannot hide its strategy from its financial data. For example, a firm with a relatively high ratio of advertising expenditures to sales is believed to be following a marketing-oriented strategy. Proponents emphasize the objectivity associated with this approach.

Second, researchers can survey executives concerning the strategy orientation of the firm. Proponents note that strategy is a qualitative phenomenon that cannot be assessed quantitatively. Critics charge that top executives' opinions do not always agree with comparing actions or with the views of other members of the top management team.

Third, researchers can examine all available data, including financial statements, personal interviews, and articles written by third parties. This is the most time-consuming approach and does not eliminate subjectivity. However, proponents of the "expert" approach argue that it is the most thorough means of assessing strategy.

Regardless of whether financial, perceptual, or other data is utilized, cluster analysis has been the predominant tool of strategic group researchers for

classifying businesses into strategic groups (Cool and Schendel, 1988; Derajtys, Chrisman and Bauerschmidt, 1993). However, the appropriateness of this technique has been seriously questioned (Barney and Hoskisson, 1990; Ketchen and Shook, 1996; Thomas and Venkatraman, 1988). Hatten and Schendel (1977) cautioned that the application of factor analysis or clustering algorithms to discover strategic groups in an industry rests on the untested assertion that these groups actually exist. Barney and Hoskisson (1990) noted that on industry data as well as theoretical data, any clustering algorithm, when applied to analyze data, will yield a set of clusters. These resultant clusters should not necessarily be directly interpreted as strategic groups. The theoretical question as to whether strategic groups actually exist or whether they are simply artifacts of the algorithms utilized to generate clusters still remains unanswered (Barney and Hoskisson, 1990). Although cluster analysis remains the chosen methodology for most strategy-performance studies (Cool and Schendel, 1988; Derajtys, Chrisman, and Bauerschmidt, 1993), researchers have begun to more greatly emphasize the importance of classification schemes utilized in configuration studies (Dess, Newport and Rasheed, 1993).

The primary weakness of cluster analysis is that it concentrates on similarities and does not account for strategy differences. As such, it is suggested that studies featuring cluster analytic techniques *also* utilize an alternative means of strategy assignment that allow for *degrees* of strategy measurement and compare results. Strictly interpreted, resource-based theory argues that forcing classifications based on any limited sets of generic strategies is inconsistent with an emphasis on firm resources; this approach provides a compromise that allows for unique strategy assignments while enabling tests of the strategy-performance linkage.

Although early studies (e.g., Dess and Davis, 1984) suggested a link between strategic group membership and performance, not all studies utilizing the cluster methodology have supported the association. Katobe and Duhan (1993) identified three strategy clusters among Japanese businesses – "brand skeptics, mavericks, and true believers" – and found that membership in one of the groups was not a significant predictor of performance. Rather, the link between strategy and performance was moderated by organization situational variables such as the degree of emphasis on manufacturing and profitability. Other recent studies have also examined variables thought to moderate the strategic group-performance relationship (Davis and Schul, 1993; Zahra, 1993).

Managerial Consensus

It is not sufficient to investigate the strategy-performance relationship without giving consideration to managerial consensus and the degree to which managers (especially members of the top management team) agree on strategy (Thomas and Ramaswamy, 1996). If consensus is linked to performance – an argument advanced by Bowman and Ambrosini (1997) and others – then one may argue that some competitive strategies lend themselves to greater agreement among managers. For example, consensus may be high among segment controllers where everyone seems to understand the niche being targeted by the business, but might be low among first movers where the essence of the strategy is not always well understood (Wooldridge and Floyd, 1990). Strategy coherence – the consistency of strategic choices across business and functional levels – has also been linked to performance (Nath and Sudharshan, 1994). There is also increasing evidence that strategy formulation is linked to the top executive's personal philosophy and personality (Kotey and Meredith, 1997).

Much of the research – predominantly that from within the second school – has been criticized on validity and reliability grounds. Many of these studies surveyed only the chief executive officer of an organization and ignored other members of the top management team and middle- and lower-level managers. Although these studies *assumed* that CEO accounts of strategy were accurate, recent research has seriously challenged the overreliance on CEO perceptions. Golden (1992) found that

58 percent of CEO's he surveyed did not agree with the previously validated accounts of their organizations' past strategies.

Inputs into the strategic management process extend well beyond the top executive. Many organizational variables and personal attributes have been linked to the strategy process in the literature (Bowen, 1987; Chaganti and Sambharya, 1987). For example, aspects of the strategy-making process and the content of business strategies may also mediate the organizational context and structure relationship. Management's self-interest, their personalities, interpretations, and influences on strategy have been examined (Guth and MacMillan, 1986; Janis, 1972; Smircich and Stubbart, 1985; Walsh and Fahey, 1986).

Measurement of Performance

The measurement of performance has also plagued strategy researchers for more than two decades (Venkatraman and Ramanujam, 1986). While strategy researchers struggle with various performance measures such as return-on-assets, stock price and revenue growth, many companies are beginning to use a mixture of financial and non-financial measures for performance (Kaplan and Norton, 1997; Wiliford, 1997).

Organizational performance is traditionally measured in three ways. First, financial measures provide objective artifacts of a firm's performance. Accounting data such as return on assets (ROA), return on investment, revenue growth, and market share have been applied to numerous studies. Proponents of using financial measures emphasize the objectivity associated with comparing the performance level of various business units along standardized lines. Financial measures remain the most popular and widely accepted approach in strategy-performance studies.

Second, non-financial measures include subjective areas of performance such as ethical behavior and stakeholder satisfaction with performance. Viewing performance through a non-financial lens can provide insight into organizational process and outcomes that cannot otherwise be seen via financial measures.

Third, hybrid approaches consider both financial and non-financial measures. Examining changes in stock valuation is a function of both objective, accounting-oriented data, and investor judgments about qualitative performance and future prospects for the firm. The "balanced scorecard" is a hybrid approach that has received increased attention in the literature. The balanced scorecard relies on multiple measures of performance, including both financial and non-financial measures (Kaplan and Norton, 1997).

Most researchers agree that multiple measures offer a rich perspective that cannot be seen by a single approach. However, a consensus on which combination is most appropriate has not yet emerged (Wiliford, 1997). Research in the field should follow a hybrid approach that is less susceptible to validity or reliability concerns associated with a single method.

New Directions: Research and Practice

The strategic management field is replete with concerns about its practical relevance (Gopinath and Hoffman, 1995). According to critics, research that cannot provide managers with improved decision-making abilities does not serve one of the field's primary constituencies (see also Dacko and Sudharshan, 1996). The increased rate of change associated with the internet, as well as the strategic premium it places on speed and responsiveness, create challenges for strategy research designed to influence practice.

At its best, strategic management represents an applied field grounded in theory representing a myriad of perspectives. Although theoretical development is a tedious, often time-consuming process, competitive strategy research that proposes and tests new approaches in a timely manner is critical if the field is to influence practice in the future.

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