Dynamics of Competitive Strategy

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Higher levels of improvising are likely to occur where events are more harmful and socially disruptive (with respect to problems of organizing); where organizing occurs in boundary spanning units that are not expected to be involved during the immediate emergency period (extending and emergent types); where key participants are involved later and are not experienced in the post disaster roles they enact, where the disaster roles performed include a leadership component, but are not part of broader role repertoires; where complexity of the division of labor is higher at the organizational and key participant levels; where disaster experience is evidenced at the individual and community levels, but formal preparedness is not evidenced at the organizational level; and where the impacted community is non-metropolitan. (pp. 160-161)

This empirical backdrop provided the basis for their specification of a series of propositions-"laws of interaction," in their language—whereby role enactment, organizing qualities, disaster event characteristics, community qualities, organizational features, and participant characteristics are interrelated (see pp. 174-179). After a rather difficult but logically consistent elaboration, the team derived a more comprehensive theoretical paradigm, wherein any single disaster event is treated as but one aspect in the life cycle of each impacted system.

The conceptual and measurement tools developed in this book will provide future researchers with significant assistance in assessing more rigorously the functionality (in terms of effectiveness and efficiency) and the tenability (in terms of personal rewards and role/person fit) of future disaster responses. For tough-minded and serious students of organization, collective behavior, or disaster, this work is must reading. There is much here to ponder, both in substantive content and the quality of craftsmanship. Simply put, this is good science at its very best.

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Dynamics of Competitive Strategy.

Ken G. Smith, Curtis M. Grimm, and Martin J. Gannon. Newbury Park, CA: Sage, 1992. 201 pp. \$36.00, cloth; \$17.95, paper.

This book compiles and synthesizes seven years of empirical research on competitive interaction and the dynamics of competitive strategy by a group of strategy scholars at the University of Maryland. This group involved the authors and, for some of its parts, former doctoral students Ming-Jer Chen, Harry Sapienza, August Schomberg, Greg Young, and Leith Wain. The work reported in the book has been previously published in journals and book chapters. The compilation and synthesis in book form is convenient and facilitates a critical review of the achievements of this

research effort, although it would have been helpful for the book to report the instruments and procedures used in the research in more detail, perhaps in an appendix. Readers who want to evaluate the research methods in detail will have to consult the published journal articles.

The research focused on "competitive interactions" as the unit of analysis. The theoretical framework for studying competitive interactions was based on communicationinformation theory. In this framework, an actor (firm) takes specific competitive actions (e.g., a price cut). A communication channel (e.g., a common customer) connects the competitive action taker and the responder(s). The responder(s) engages in a specific competitive response (e.g., a counter price cut), which has potential effects on the action taker. Competitive actions and responses affect and are affected by the industry's competitive environment. The researchers developed measures for variables such as competitive action (radicalness, magnitude, scope, degree of threat, implementation requirements) and competitive response (imitation, timing, order, likelihood). These measures were used together with measures from other strategy research concerning the relevant attributes of competitive action takers, responders, and the competitive environment of the industry. Four studies were carried out in three industries: high-tech electronic, U.S. domestic airlines, and computer retailing. The research methods included interviews, questionnaire surveys, and archival data collection. These are briefly discussed in chapter 2.

The studies were organized around testing hypotheses with linear regression methods. The hypotheses were derived from the communication-information framework. Chapters 3-8 generally discuss findings concerning each of the major building blocks of the framework and formulate some questions for further research. The last chapter in the book (chap. 9) provides a useful summary of the findings. Some of the key findings are that (1) the reputations of acting firms predict competitive responses, (2) competitive responses are at least partially a function of the characteristics of competitive actions. (3) the characteristics of the responding firms are associated with the characteristics of the responses (likelihood, speed, order, etc.), (4) differences in the competitive industry environment are associated with differences in competitive actions and responses, (5) a slow-second strategy for easy-to-imitate competitive actions may be preferable to first-mover, fast-second, slow-third, and late-mover strategies, and (6) cooperation among competitors is associated with higher profits.

Recently, Porter (1991) has called for a more dynamic theory of strategy. This book has in some ways anticipated Porter's call. Few previous empirical studies in strategy have made competitive interaction the unit of analysis, and even fewer have tried to measure it. This is an important contribution. Porter (1991) has also identified several unresolved issues to guide research toward a dynamic theory of strategy. The research reported in this book has addressed some of these. For instance, it tries to explain differences in firm performance within the same industry in terms of competitive actions and responses and to examine the

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effects of the radicalness (newness) of strategic actions. These are also useful contributions.

There are, however, two problems with the research reported in this book that limit its usefulness as a building block for a truly dynamic theory of strategy. First, the link between theory and research is fairly weak. This is the consequence of adopting, somewhat uncritically, the communication-information model as the theoretical foundation for studying dynamic competitive interaction and dismissing, somewhat too readily, microeconomic models of competitive behavior. Saloner (1991: 126) pointed out that theoretical models in strategic management serve metaphorical purposes and are evaluated in terms of how well they help develop well-reasoned arguments by which conclusions are reached from assumptions: "Understanding why the results obtain, i.e., how the model 'works,' is of primary interest. That understanding is what provides the 'insights' which are the final outputs of the endeavor." The authors of this book conclude that "... our research, from our studies, within three different industries, offers clear support for the communication-information model of competitive dynamics, although it does not preclude the use of supplementary or alternative approaches such as game theory. There was clear confirmation of the model and its four components as they relate to predicting different competitive responses, and our findings were consistently in line with the predictions that were derived from the model itself" (p. 182). In view of the criterion established by Saloner, this is an overstatement. The hypothesis development in the various studies is not tightly linked to the substance of the putative communication-information theoretical foundation. Actors, actions (Are they really to be viewed as equivalent to messages?), competitive environment, responders (Why not simply call them rivals?), and responses are categories that fit equally well in a game theoretic or evolutionary economic framework. The dimensionalization of these categories is primarily informed by the strategy (e.g., market leadership), I/O (e.g., reputation, threat), and organization theory (e.g., structural complexity) literatures; not the communication-information literature. There is no tight deductive reasoning from communicationinformation theoretical premises to propositions and hypotheses. The theory of communication-information does not seem to be particularly enriched as a result of the findings of this research.

Second, while the authors must be commended for creating a large and complex database, their cross-sectional studies remain only weakly dynamic. They establish competitive-action—competitive-response events but then use cross-sectional analysis to examine the type of statistical associations involving static variables typically found in traditional empirical strategy research. The research does not examine repeated competitive-action—competitive-response sequences and thus cannot identify learning in the competitive interactions. While referring occasionally to data obtained through interviews, the book does not provide a model of the strategic decision-making processes that generate the competitive actions and responses. In light of

this, the authors' claim that "Actions and responses are explained in the model from the perspective of the decision-making process of the firms involved" is also overstated (p. 19).

So what should be done to develop a truly dynamic theory of strategy? Porter (1991: 116) concluded that "... detailed longitudinal case studies, covering long periods of time, [are] necessary to study these phenomena." Similarly, Camerer (1991: 146) observed that "ironically, the implication is that focused case studies of firm behavior and industry evolution. which have been largely replaced in strategy by large empirical studies of archival data, might be an excellent source of data if case researchers are sensitive to game-theoretic variables." Organization theorists would add that at this stage of development, process rather than variance research (Mohr, 1982) may be necessary to advance our understanding of the evolution of interplays of industry-level sources of competitive advantage, firm-level sources of distinctive competence, and competitive strategy and action (e.g., Burgelman, 1994). In view of this, the publication of *Dynamics of Competitive Strategy* serves a useful purpose. It competently illustrates what is achievable with the traditional research approach in strategic management and thereby challenges other approaches to show what additional and deeper insight they can provide.

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Chester I. Barnard and the Guardians of the Managerial State.

William G. Scott. Lawrence, KS: University Press of Kansas, 1992. 256 pp. \$27.50.

Chester Barnard's *Functions of the Executive* holds a place of honor in the sparsely populated pantheon of management and organization theory's great texts. Although Barnard's obtuse formulations, belabored points, and simplistic examples may have bedeviled generations of graduate students, his ideas have nevertheless garnered almost