

# Strategic Organization

<http://soq.sagepub.com>

---

## The field of strategic management within the evolving science of strategic organization

Joseph T. Mahoney and Anita M. McGahan  
*Strategic Organization* 2007; 5; 79  
DOI: 10.1177/1476127006074160

The online version of this article can be found at:  
<http://soq.sagepub.com>

---

Published by:  
SAGE Publications  
<http://www.sagepublications.com>

Additional services and information for *Strategic Organization* can be found at:

Email Alerts: <http://soq.sagepub.com/cgi/alerts>

Subscriptions: <http://soq.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations (this article cites 11 articles hosted on the SAGE Journals Online and HighWire Press platforms):  
<http://soq.sagepub.com#BIBL>



**SO!APBOX  
EDITORIAL ESSAY**

## **The field of strategic management within the evolving science of strategic organization**

**Joseph T. Mahoney** University of Illinois at Urbana-Champaign, USA

**Anita M. McGahan** Boston University, USA

The strategic management field has matured over the last decade and is now at a critical point in its development. This essay suggests a direction for how the field can evolve by outlining an integrative research and teaching agenda that we hope inspires scholars in our field. There are significant challenges and risks in front of us. A tip of the iceberg is that students now rank poorly their strategic management courses at several top business schools, which through much of the 1980s and early 1990s typically earned exceptional teaching ratings.<sup>1</sup> At present, business students at many schools seem to prefer topics such as entrepreneurship, technology management and corporate finance. In a few instances, departments that had once been dedicated to strategic management have folded. Even in schools where strategic management courses are strong, the curriculum may not be entirely up-to-date. The number of strategy journals and other research outlets with top-tier impact has not increased as fast as needed (in part because of reputational lags at new journals), and thus strategy researchers compete for limited slots available in research publication outlets that will count significantly in promotion and tenure decisions.

Our critics come from other corners as well. Managers often criticize strategic management scholarship for being unnecessarily theoretical and dissociated from the real problems of strategy. While practitioners often find useful our research in change management and the strategy development process, many other frameworks are not part of the regular practice of management but are the special province of consultants.

Scholars in the root disciplines of our field often criticize strategic management research for insufficient grounding in theory.<sup>2</sup> The strategic management field has a relatively weak voice in the formulation of public policy, perhaps because we have not focused sufficiently on the important implications of our insights for managers in government and other non-profit domains

(Barney, 2005).<sup>3</sup> We have been accused of encouraging our business students into the behaviors that led to recent ethics and accounting failures in large firms such as Enron, Tyco and WorldCom. Perhaps most important, those of us committed to scholarship in the field increasingly have an unsettling sense that we are not working on the most important strategic issues of our time. In sum, the number and intensity of constituencies discontented with strategic management seems to be rising and should not be ignored.

There are also some major accomplishments worth celebrating. Research in strategic management has improved general understanding of major issues in the resource-allocation process – from analysis to diagnosis to strategy formulation to implementation. Strategic management faculties have trained a generation of BAs, MBAs and working managers, and have had a central and substantial influence on strategic thinking and the practice of management. We have developed important theoretical insights concerning practical strategic issues such as vertical integration, diversification and managing the multi-business enterprise both home and abroad.

The central message of this essay is that strategic management scholars (including the two of us) should raise our aspirations. We need to move ahead with the confidence and authority to have the kind of meaningful impact envisioned when strategic management emerged as a distinct field years ago. This essay reflects this view, as it also reflects on opportunities for the strategic management field to confront new issues with integrative theory concerning strategic organization. In addition, the strategic management field will benefit from a renewed focus on important phenomena and new pedagogy that builds on our heritage of innovation. Taking on these opportunities now is crucial for revitalizing the intellectual base and agenda of the field, for understanding the heterogeneous performance of institutions and markets, and for re-establishing and increasing creative complementarities between teaching and research. The opportunity today is to generate new integrative theory based on the empirically validated insights that we have obtained over the past several decades. This new integrative theory emphasizes property rights and carries implications for the strategic organization of both institutions and markets. By tripping off a new cycle of integrative knowledge creation and scientific discovery about the strategic organization of both institutions and markets, the strategic management field will better serve the needs of students, executives, scholars (including those in the social-science disciplines) and society.

## **Genesis of strategic management**

The field of strategic management emerged mainly during the 1970s and early 1980s from the social and administrative sciences, primarily because of interest among both practitioners and students in analytically grounded and focused heuristics for understanding the principles driving organizations to sustained

superior performance (for an excellent review, see Hoskisson et al., 1999). The central aim of our field is to explain and predict the performance of organizations, and particularly firms, as distinct from the performance of markets, individuals and economies. In this article, we maintain that the findings from our research to date indicate that firm performance is substantially embedded in the performance of markets and other institutions. Our principal audiences are managers and managers-to-be, whom we try to reach both pedagogically and practically, and other academics in the social sciences, whom we seek for legitimacy and influence. We want to add policy-makers and managers in a range of other institutions to this list. Explaining organizational performance requires both theory – to define organizations, performance, their interrelationships, etc. – and empirical analysis. We call specifically for a broadening of the research and teaching agenda to ‘strategic organization’, an approach that considers simultaneously the purposeful action of individuals in shaping both institutions and markets.

From the inception of strategic management, one important antecedent field – business policy – offered the ‘big picture’ on firm performance differences, but that big picture derived mainly from field-based methods rather than the cross-sectional analytics of the social sciences. The detailed theory building and empirics of the social sciences produced insights on organizations and performance, but were often relatively narrow and difficult to translate into action by general managers with broad responsibilities for resource allocation (Bower and Gilbert, 2005, Shanley and Peteraf, 2007). The increased financial valuations of companies since the 1980s make both the pragmatic and scholarly agenda of strategic management of explaining firm performance more compelling today than ever. Yet we have also established that firm performance cannot be explained and predicted independently from relevant markets and supporting institutions.

As the strategic management field evolved, we have had to defend its distinction from root disciplines and traditions while (sometimes privately) worrying about the quality of our theory and methodologies and about the comprehensiveness and accuracy of our empirics. Both of your authors have been called into deans’ offices and attended business school retreats to articulate fully the character and contributions of strategic management, and we typically found ourselves defending our field to colleagues as an important, rigorous, and distinct field of study with its own theory, methods and empirics. Both of your authors also admit to feeling relieved (especially during the early part of the 1990s) when we were successful in the argument.

The necessary defensiveness of earlier times is turning into a liability. For the strategic management field to flourish, we need to become more cohesive and boldly inspiring rather than defensive, rigid and timid. The field must connect to and embrace new theory, methods and empirics from other social and administrative sciences, and make them relevant to students, managers and other stakeholders. In particular, we have much to learn from the fields of anthropology, history, political science, social psychology and sociology, and much to gain from collaborations with colleagues in these disciplines as well as

those in entrepreneurship, finance, organizational behavior, information sciences, and technology management. Through collaborations with scholars in these fields, we can generate new knowledge and systematic original theory-building. Some of these connections are happening already: interdisciplinary research studies that achieve the precise standards of each embedded discipline carry the potential to lead us toward important strategic insights (Postrel and Rumelt, 1992). Much more research of this sort is needed.

In this essay, we also maintain that the core agenda of the field of strategic management be extended in several ways. The approach we advocate emphasizes the complex challenges of managing diverse institutions regardless of their formal contractual structure as firms, non-profits, or even public agencies. We also recommend deeper, integrative treatment of the interplay between institutions and markets, each of which is a form of strategic organization (Williamson, 1975, 1985). The perspective we advocate is that our constituents can benefit from the insights we generate regarding how organizations of both types yield heterogeneous performance.

## Accomplishments

To move ahead with confidence, to embrace new theory, methods, empirics and pedagogy, we can look back on how we made previous advances – and there are many in the last 20 years. The following list represents some of the ideas that could be readily adapted to the new agenda of strategic organization in both institutions and markets.

### Context and structure matter

A fundamental set of findings in strategic management can be summarized by the idea that context and structure matter in an integral and systemic way both for firm-level behavior and organizational performance. A principal framework is industry structural analysis (Porter, 1980).<sup>4</sup> This fundamental way of thinking has been complemented by and has influenced other strategic insights (McGahan, 2004). Exciting research on formal and informal institutions, culture, ideology, ecosystems and networks (Gulati et al., 2000; Bresnahan et al., 2006) offers new ways of strategic thinking about the relationships between firm-level behavior, organizational performance and external structures. We hope that research will continue on the structure of both private- and public-sector organizations and on the implications for organizational performance.

### Competitive interaction matters

A second theme builds on research by our colleagues in economics: Competitive interactions among firms often occurs in complicated, sophisticated and subtle

ways that are not wholly anticipated by either antitrust policies or conventional theories of industrial organization. For example, building on our research heritage (Penrose, 1959; Nelson and Winter, 1982), we now have reached a better understanding about how companies compete for resources, deploy these resources in economically attractive market segments and utilize these resources efficiently with dynamic capabilities. As an example of more subtle forms of competitive interactions, consider that a firm may have an incentive to encourage its rival firms to experiment with new technologies because of potentially beneficial spillovers, technological improvements and market enhancements (McGahan and Silverman, forthcoming). On top of this consideration, entrepreneurial experiments that lead to failure permit survivors to learn. One firm's innovative failure may create another firm's real growth options for the future (Kogut, 1991; Bowman and Hurry, 1993; Trigeorgis, 1996).

### **Firm behavior is complicated**

Research in strategic management suggests that neoclassical and modern theories of economics often fail to explain and/or predict important elements of firm behavior and market outcomes. Legitimacy, status and intra-organizational dynamics often vary quite dramatically across firms that otherwise may appear to be similar. Sociological and social psychology approaches can highlight new explanations and predictions about organizational tendencies that seem to defy traditional economic reasoning (Reuf, 2003; Weick et al., 2005). The performance implications of personal relationships, cognition and the affective interplay between people remain largely unexplored by strategic management scholars. Path dependency and institutional change are also largely unexplained. New research employing cognitive models on the framing of strategy problems are a beginning (Tripsas and Gavetti, 2000), but there is much left to do. Understanding these and other inter-organizational dynamics requires an interdisciplinary approach that embraces theoretical and methodological pluralism (Bowman, 1990; Mahoney, 1993; Cannella and Paetzold, 1994; Mahoney and Sanchez, 2004; Van de Ven, forthcoming).<sup>5</sup>

### **Leadership and management are distinctive skills and both are crucial to the performance of the firm**

We have become increasingly concerned in recent years that the strategic management field has focused so much on strategy that management is no longer in the foreground of our vision. As Barnard (1938) noted long ago, failure to cooperate, failure of cooperation, failure of organization, disorganization and the destruction of organization are characteristic facts throughout human history. To be sure, managerial dilemmas cannot be fully understood without considering economic incentives, and yet, if anything, the modern organizational economics literature in strategic management building on

property rights, transaction costs and agency theory has taught us that economic incentives alone cannot completely solve managerial dilemmas (Miller, 1992; Kreps and Baron, 1999; Mahoney, 2005). Leadership and responsibility are essential for the distinctive competence of an organization (Selznick, 1957). Foresight, long-term purposes and high ideals provide the basis for the persistence of (intra- and inter-firm) cooperation and organizational coherence. Management behavior is not only informed by the study of economic incentives but also by the study of intrinsic motivation from a psychological perspective, the study of cooperation and complex interdependencies from organizational and sociological perspectives, and the study of organizational ideology from a political science perspective (North, 1990; Scott, 1995).

### **Firms exist at multiple levels**

A final theme from strategic management's past is that theories of the firm are elemental for developing new intellectual combinations of thought to explore what Barnard (1938) called the 'science of organization' (see McGahan and Mitchell, 2003, which emphasizes this point and discusses the nature of these building blocks).<sup>6</sup> Presently, a strategic theory of the firm is at a pre-unified state of theoretical development. We cannot succeed without acknowledging why firms exist in a nexus of relationships between governments, individuals, markets and other social institutions. An integrated agenda in the field of strategic management is a feasible, challenging and rewarding endeavor in the evolving science of strategic organization (Gavetti and Levinthal, 2004; Drnevich and Shanley, 2005; Mahoney, 2005).

Bridges can and should be built between contested intellectual terrains. As an example, Mahoney (2005) reviews and highlights connections between: first, the behavioral theory of the firm; second, transaction costs theory; third, property rights theory; fourth, agency theory; and last, dynamic resource-based theory, and suggests that content research and process research need to be joined in the next generation of strategic management research. While these theories are related, each theory is unique, with its own canonical problems. Joining the theories into an integrative approach is essential for yielding a range of new insights (Villalonga and McGahan, 2005). The behavioral theory of the firm may be joined with transaction costs theory (Nickerson and Zenger, 2004); and the real-options and dynamic capabilities literature may be joined (Li et al., forthcoming) in the next generation of research.

### **Marching orders**

The themes above call out different orders for the next march. Let us consider recurring words in these orders, like 'new', and 'phenomena-oriented'. The strategic management field can flourish if it embraces new and integrative theory,

methods and empirics, and re-embraces a practical problem-solving orientation (Postrel, 2002; Nickerson and Zenger, 2004). Indeed, building theory for strategic management has several objectives. The central purpose of our research should be to understand social organizations, and particularly firms, but also markets and other institutions that shape the creation of value and its distribution across various constituents. We need research rigor in terms of conceptual adequacy, methodological innovation and the generation of accumulated empirical evidence. We also need practical relevance. Pragmatically, the validity of an argument depends upon the consequences of acting upon it (Dewey, 1929; Kaplan, 1964). The criticisms we face – from students, managers, policy-makers, and society at large – may be the tip of an iceberg that we still have time to avoid hitting.

There are pressing events going on in the world around us that are simply too important and consequential to ignore. Here is a partial list: pervasive and worsening poverty among vast populations of the economically disenfranchised; natural-resource depletion; energy challenges; digitization; the globalization of many industries; the prospect of skyrocketing interest rates; the integration of capital markets across many countries; corruption; and terrorism (North, 1990; Shleifer and Vishny, 2002; Marcus, forthcoming). Each of these phenomena carries the potential to challenge the fundamental premises that govern the way corporations today are organized to generate value for customers, shareholders and employees. To be sure, each of these issues is also within the province of other social science and administrative disciplines, yet the field of strategic management can offer perspectives that are unavailable through the lenses of these other disciplines. For example, our theory and managerial frameworks on sustainability offer insights that can inform the policy debate on sustainable business practices for poverty alleviation (McGahan, 2006). It is likely that the resource-based view can yield significant insights on the consequences of natural-resource depletion for firms, customers, employees and communities that have been supported historically by the exploitation of such resources.

To clarify, let us emphasize that we are not submitting that the fields of economics, political science, and energy sciences should cede their intellectual domains to the strategic management field, despite the abject failure of many policies from these fields over the past several decades. Examples of these failures include the policy prescriptions from economists that led to devastating and deepening poverty during the mid-1990s in Russia, and the analyses by political scientists and economists that led to billions in foreign aid to sub-Saharan Africa over the past 40 years, with an outcome of lower income per head in the region. Yet of course there are also instances of effective policies in each of these domains. Our hope is that research continues in each of these areas related to the vitally important problems described here, and that the policy prescriptions based on such research continue to improve.

We also believe that the field of strategic management offers new and critical perspectives on these issues. As our field matures to encompass the full agenda that we have suggested, it has several especially relevant features. We

deal with the ability of the individual actor to shape organizational outcomes; we analyze a broad range of institutions and markets; and we take heterogeneity in performance as our principal topic.

We also observe that the strategic issues are of such broad and deep significance that all relevant perspectives – such as ours – are needed to shed light on effective business and public policies. Several elements of our suggested approach are likely to enhance and accelerate the potential for our contributions. Each of the accomplishments listed above could equally apply to multilateral agencies such as the World Trade Organization (WTO), governmental organizations such as the President's Emergency Plan for Aids Relief (PEPFAR), non-governmental organizations (NGOs) such as Oxfam, funding agencies such as the Rockefeller Foundation and public–private partnership organizations such as those supported by the Clinton Foundation.

The strategic management field's commitment to peer review, collaborative presentation, publications and the training of new research scholars promotes the production of public knowledge that neither companies nor consultants would or perhaps could have produced on their own (Huff, 2000). The knowledge we generate applies to managers in firms and managers in public organizations in government and the broader non-profit sector. For example, we can generate integrative insights about knowledge and capability management in public-sector institutions that are not pursued in other disciplines and fields of enquiry. We know how to evaluate context and competitive interactions. Graduate and professional schools of government, public health and education often promote public–private partnerships to achieve efficiencies that are in the common interest. We should reach out to these public managers and their public policy issues and make a commitment in the strategic management field to serve these constituencies as we have served, and will continue to serve, private-sector managers and firms. It is essential to our vitality and relevance.

There are untapped opportunities to offer strategic insights to our business students, managers, organizations, and society. Many of these opportunities relate to problems of the commons, to use the language of political science (called externalities in economics). Here are some opportunities worth considering.

### **Develop new teaching materials and pedagogy to reinvigorate our courses**

The first courses in strategic management, developed and implemented in leading business schools during the 1970s and 1980s, were heralded for their pedagogical innovation and for their resonance with students. Today, many of our strategic management courses are viewed as repositories of multiple frameworks that are not tightly integrated and that are aging rapidly. In many of these courses, the macro level of analysis is the industry rather than the country or the culture. Few of these courses emphasize a long historical perspective.

We need pedagogy that is innovative in both content and context, including new course materials that demonstrate the breadth of strategic issues that we analyze and the depth of our critical frameworks. Contextualism recognizes that there is a gap between universal theory and concepts useful in a specific context, that is, useful to a specific manager, at a specific time, on a specific issue.<sup>7</sup> That said, we hasten to add that the recognition of boundaries and the limitations of knowledge do not imply ad hoc approaches to problem solving. Indeed, it is critical that the material that we teach (just as the research we produce) should add up to something cohesive and integrative. The insights that emerge from course development ought to be both valued and valuable. Michael Tushman of Harvard Business School often speaks about his experiences in tying together research and teaching themes by working with managers in specialized educational programs designed specifically for this purpose: translating scholarly insights from professors into practice, and practical experiences from managers into scholarly insights for professors.<sup>8</sup> Think of bringing the same corroborative, resonant pedagogical approaches to MBA and undergraduate programs. And think of the power of complementing this approach with a longer historical perspective.

Our central recommendations are as follows.

1. Creative approaches are needed.
2. We need to teach about important questions where managerial capability as well as strategic choice matters.
3. We should teach about organizations and markets together.
4. Teaching assignments should be integrated with research assignments to increase their complementarities.
5. Innovative curriculum designers and teachers should be recognized for their contributions in promotion and tenure processes.

We want to be helpful and specific, without being restrictive, about how pedagogical innovation may occur. With this objective in mind, we provide a few examples of pedagogical innovation to clarify the kinds of improvements that we advocate. First, one facet of pedagogical innovation could involve structured field experiences combined with integrative class discussions. Attempting such an integrative educational experience should prove to be challenging and exciting for both instructors and their students. Above, we refer to programs designed by Michael Tushman and his colleagues at Harvard Business School for IBM that yield unprecedented insights for research because of the ways in which the frameworks are tested and adapted based on their applicability in use. These programs are one example of integrative pedagogy.

A second facet could rely on integrating diverse media to simulate the complexity of real-world management problems. For example, Roberto et al. (2005) provide a multi-media case study on the Columbia Shuttle disaster in which

each student is assigned to role-play one of six NASA identities and receives computer desktop information as it unfolded through the course of eight crucial days in the mission. The complexity of the management problems facing NASA becomes evident as students experience team dynamics and the confusion and complexity of the unfolding situation. In general, the use of video, interviews, real-time digitized imagery, the internet, historical materials and other media can greatly enhance the information accessible to students for case discussions and complement traditional reading assignments.

A third facet of pedagogical innovation involves developing modes of learning outside the traditional teacher-student exchange. Peer review, peer-to-peer exchange and the cultivation of specialized student expertise represent examples of this process. The provision of real-time feedback about student comprehension through polling devices can greatly enhance even a traditional lecture because the information allows the instructor to adjust the pace and emphasis of the lecture even as it is delivered. The salient idea here is that the instructor is learning rather than only teaching in a classroom session.

Many other facets of pedagogical innovation are relevant, such as service projects, investigative travel and new kinds of homework assignments, to name a few. Rather than comprehensiveness, we call for greater creativity. Some of the lowest-hanging fruit in pedagogical innovation involves deploying more than one tried technique simultaneously, for example, employing diverse media in integrative class discussions based on field experiences (imagine a group of students making a short film about a difficult managerial situation). The opportunities are likely to deepen if new theory and important phenomena are integrated into the agenda of the strategic management field (imagine that the film is about the challenge of managing an innovative public-private partnership in a setting of poverty).

The marketplace of ideas, like the marketplace for differentiated products and services, has its barriers to entry and market frictions (Arrow, 1974). Academic programs, beginning at the undergraduate level and certainly at the graduate level, typically inculcate students in ideas and techniques that are approved by senior faculty. These insider instruments of control are accompanied by outside influences, such as financial support for certain kinds of research and, to a lesser extent, certain kinds of teaching. As a hypothesis, would a professor write (or assign) a case analysis that was critical of A. H. Robins's handling of the Dalkon Shield crisis if that professor is on the faculty of the university that received a substantial endowment from the Robins family? Just as entrants in real-world product markets need to be tough, strategic management researchers who are willing to ask important questions need to be tough-minded and to be prepared to field criticisms. Intellectual training is not sufficient to prepare scholars to reach their full potential in the marketplace of ideas. Staving off the 'slings and arrows of outrageous fortune' (to quote Shakespeare's Hamlet) is also part of the deal if we are to avoid going along to get along.

## Develop new theory at the intersection of standing theoretical streams

Two fundamental questions in the history of economic thought concern value creation and the distribution of value in 'the wealth of nations' (Smith, 1776; Schumpeter, 1954). These two questions are – or arguably should be – the two fundamental questions concerning a strategic management approach to what a firm is (i.e. the theory of the firm discussed in Rumelt et al., 1994). In a business world in which increasing importance is attached to intangible (knowledge-based) resources – as Itami and Roehl (1987) predicted two decades ago – and consequently greater deployment of implicit and incomplete contracting (Williamson, 1996), viewing shareholders as the sole residual claimants is an increasingly tenuous description of the actual relationships among a firm's various stakeholders (Hart, 1995; Zingales, 2000). What we see in real-world corporate law is that legal rules and property rights are changed in order to constrain corporate activity when other constituents are not satisfied.

Research based on the assumptions of perfect input-factor markets and complete contracts cannot deal effectively with the fundamental questions of wealth distribution. Such assumptions serve well neither our research in the field of strategic management nor management practice. The application of theories derived under these assumptions to real-world settings can lead to the implementation of policies that are exploitative and tragically inappropriate.<sup>9</sup> Such a research approach also cultivates a perception among our business students that the relationships between firms and people are merely clinical rather than rich and experiential. A more nuanced and multi-faceted approach to the practice of business will yield both greater insights about practice and a foundation for further theoretical developments. Consider, by contrast, a strategic organization model of sustainability that considers how customers and employees will co-evolve with the firm (and industry) through exchange and that encourages managers not only to capture economic value but also to ensure that customers and employees also have economic incentives to invest for future productivity (Coff, 1999; Wang and Barney, 2006). This approach would maintain the sophisticated principles of the economics of organizations, and would also consider insights about human capital grounded in related social sciences.

On the content side, the next generation of resource-based research (which assumes imperfect factor markets) needs to be joined with the modern property rights research literature in economics (Hart, 1995) and corporate finance (Zingales, 2000), which provides an incomplete contracting approach. This approach will lead to a rigorous economic foundation for a stakeholder theory of the firm leading the field back to its roots in business policy from the Harvard Business School of the 1950s, but now with rigorous theory to back up the stakeholder orientation. Such an approach will enable the development of a strategic theory of the firm that deals simultaneously with economic value

creation and value distribution (Cornell and Shapiro, 1987; Donaldson and Preston, 1995; Coff, 1999; Post et al., 2002).

On the process side, there will be a need to re-consider processes of conflict resolution among the firm's stakeholders, research that will lead the strategic management field back to its Carnegie School origins concerning the behavioral theory of the firm (Simon, 1947, 1982; Cyert and March, 1963). A related renewed interest in stakeholder theory will lead us closer to studying stakeholder firms such as Cummins Engine, Lincoln Electric, Merck, Motorola and Royal Dutch/Shell, among others (Post et al., 2002). In fact, McGahan has written on the General Motors' Saturn car division, whose original mission, governance structure and internal processes fit the key criteria of a stakeholder firm (McGahan and Keller, 1995). For example, employees established themselves as influential stakeholders who contribute to problem solving, conflict resolution and quality improvement (see also Kochan and Rubinstein, 2000).

### **Take on the tough, intractable, difficult, significant issues of our age**

Perhaps inspired by John Maynard Keynes, the statistician John W. Tukey (1962: 13–14) noted: 'Far better an approximate answer to the *right* question, which is often vague, than an *exact* answer to the wrong question, which can always be made more precise.' It is a grave mistake for social science research to forgo approximate knowledge. The most important and interesting questions in the field are thorny, difficult, theoretically knotty and resistant to prediction. In the world today, some issues have emerged that are so pervasive and of such overpowering significance that they must command our research attention (Van de Ven, 2002). There is much to gain by employing techniques and perspectives that yield approximate insights into the right questions, despite the fact that these practices may play on our insecurities about the robustness and legitimacy of our young field. Because we deal in a domain that vitally reflects societal well-being (namely, the determinants of organizational performance), we cannot ignore societal concerns (Hambrick, 1994). The stakes are simply too high to avoid taking the risks.

The implications of these issues for strategic management arise at a number of levels. First, each of these major phenomena in the world stands to influence and to be influenced by business institutions, processes and behavior. We need to know much more about the dynamics of macro-business change. The relevant analyses may cover familiar territory, such as how can and should inventories be managed under different interest-rate regimes. They may explore new ground related to other institutions, such as, how reasonable alternative future scenarios for the evolution of the WTO change the global prevalence of intellectual-property protections and influence the deployment of knowledge-based capital in developing countries.

Exploring this new ground will likely be rewarding both academically and professionally. Multinational corporations in pharmaceutical, biotechnology and other knowledge-based industries are likely to find research on alternative futures for international organizations and intellectual property attractive to review and, indeed, support financially. But, exploring this new ground is also critically important to developing countries that may or may not have the resources to support our research activities. We should not shrink from a commitment to address tough issues implicating private, profit-oriented and resource-rich firms as well as public, welfare-oriented and resource-constrained policies. The strategic issues are too important. The new ground needs exploration. Strategic management researchers are ready to begin exploration to confront the strategic implications of these issues.

Second come the international scale and scope of the phenomena mandates framing our agenda to encompass heterogeneity in the performance of both markets and institutions as forms of organization (Walsh et al., 2006). By linking the fields of strategic management, organization theory, international business studies, macro-economics and corporate finance, we can expand our impact in this area. We need to add a new level of analysis into the mix of the interplay between national strategy and corporate strategy. For example, teasing out the strategic implications of increased global trade for companies that compete in different countries requires a multi-disciplinary perspective for which the field of strategic management is well suited. Elevated levels of trade can lead to shifting trade patterns based on comparative advantage. As multinational companies seek to confront problems in their fundamental positioning and adaptation, the implications for their organization may be significantly greater than we have previously considered. Expanding our theoretical bases, methods and empirical approaches to integrate advances that have been pioneered in contiguous disciplines will allow us to break new ground without stepping away from our established bases of competencies.

Third, each of the major phenomena listed earlier has economic, sociological, cultural, political, historical, anthropological and behavioral dimensions. One of the greatest challenges for the field of strategic management over the next few years will be to find ways to integrate diverse theoretical and empirical methods into actionable insights regarding phenomena that have these multi-faceted and complex characteristics. How can we teach and conduct research cumulatively? How do we build on each other's insights using new methods that reflect different disciplinary traditions? Making headway on these questions will require a substantial investment in conferences, journal special issues and other mechanisms designed to enhance our communication.

Fourth, these issues will test our willingness to step beyond descriptive and normative analysis into prescriptive territory. The insights that we generate into these strategic issues are likely to be politically charged, alarmist and even polemical. The field of strategic management has become somewhat conservative regarding prescriptions. We rightly avoid, as best we can, reaching beyond

what we really know in offering (potentially unsound) advice to managers about what to do. Instead, our approaches are grounded in solid analysis based on established and widely accepted empiricism. Of course, descriptive and normative thinking will continue to be valuable in the strategic management field, and yet unless we are willing to consider the strategic implications of our insights for the future, we may be guiding our constituents through the rear-view mirror. Some of the problems that confront the strategic management field today involve step-function, order-of-magnitude changes in the business environment. If we rely only on insights gleaned from established trends, we may find ourselves extrapolating from irrelevant paradigms. As our field develops, we need to establish new standards for evaluating academically rigorous contributions that acknowledge the implications of research findings for management practice under the new paradigms. Perhaps we can establish such standards with the help of leading scholars from contiguous disciplines. If one believes – as we certainly do – that the inclusion of new theory, methods and empirics informed by economics, psychology, sociology, political science and history will lead to a renewal of the strategic management field, then one way to move forward is to bring into the field leading economists, psychologists, sociologists, political scientists and historians with an appreciation for the perspectives and problems of strategic management.

Fifth, we must develop better approaches for understanding how business interrelates and interacts with other types of institutions. Some of these other types of institutions – and particularly governments and universities – have been salient in the strategic management field for decades, and yet more could be done to model and understand the diversity of relevant actors and of their interactions. We applaud Henisz and Zelner's (2003) essay in *Strategic Organization*, which calls for scholars of strategic organization to focus on non-market strategies that firms deploy in seeking economic rents (e.g. lobbying to influence regulation and laws). As the business environment changes over forthcoming decades, the interplay between businesses and other institutional and non-institutional constituents will constitute much of the action.

Other types of institutions and conditions (such as cultural norms, technological readiness, consumerism, productive efficiency, etc.) are more difficult to evaluate through the strategic management field's traditional lenses, and yet significant progress has occurred in contiguous fields that are focused on similar concerns. Some of the most important opportunities in strategic management relate to the development of absorptive capacity for the theories, methods, data and analytical techniques of anthropology, history, political science and other social sciences that have not been emphasized historically.

Finally, we suggest that we think of our field's agenda as one of explaining heterogeneities in organizational performance in a broad sense. This new approach is consistent with the conception of strategic organization that we have outlined here.

We hasten to caution our readers that there are trade-offs and risks in pursuing our recommendations. In particular, there are risks to both the individual scholar and the strategic management field in substituting a predominantly single-discipline-based approach in favor of the more inclusive and integrative approach that we advance in this article. First, we may not be judged by the standards of the strategic management field, but rather by the standards of related fields with established methods, empirical findings, approaches to policy and powerful, passionate senior professors. Yet we must remain committed, as energy is depleting despite the policy prescriptions of political scientists, poverty is deepening in many parts of the world despite the efforts of economists, and incomes are shifting in unplanned and uneven ways despite the analysis of sociologists. Second, we may hit bumps in the road within strategic management in the development of theory and in the analysis of important phenomena. Our work might, especially initially, be flawed and inconsistent, which may compound the criticisms that we face from related fields. Third, the eclecticism that we advocate by asking you, our reader, to consider other social-science disciplines such as anthropology, behavioral psychology, etc., may stretch you thin. The challenge of integrating insights from diverse perspectives should not be underestimated. Many of us may not succeed initially, and some of us may never succeed. Fourth, our new pedagogy may lead to even greater variance in student response. Some of the experiments will fail. Change in the classroom will inevitably require redoubled commitment to the process, which may distract us from our conventional research agendas. The risks for junior faculty may be too substantial. As a result of all these risks, it is our ardent hope that senior faculty in the field of strategic management, protected by tenure, will lead the charge. After all, the institution of tenure was established to stimulate just this sort of risky innovation.

### The marketplace of ideas

The field of strategic management has become institutionalized in many business schools over the last 20 years. We have accomplished a great deal, and there is much to celebrate. Scholars can now earn doctorates in strategic management and are often judged for promotion and tenure on criteria that emerge from within the strategic management field rather than from the root disciplines. We have (mostly) convinced our deans and colleagues that ours is a distinct field of study, and we have trained a generation of MBAs in our frameworks.

These accomplishments are shadowed by some important challenges that reflect, but only in part, the regular course of change as a new field emerges and develops (Kuhn, 1962). Our relationship with our root disciplines is sometimes shaky, and we are not always judged by the criteria of strategy rather than of the root disciplines. We sometimes equivocate about what we are adding above the disciplines. Our standards are too low in some instances. We are not always

systematic. We do not have a consensus about appropriate criteria for performance. Above all, our research to date has shown that the firm, which has been our principal subject of study, cannot be fully understood independently of the markets and other institutions in which it operates.

In this essay, we offer a series of ideas regarding how the strategic management field is developing. We want to encourage solutions to these problems by suggesting that this is a crucial time for three reasons: first, our courses are not commanding our students' attention as they once did; second, the opportunity for new theory is significant; and third, the problems of strategic management in the world are so compelling that we should get our acts together. We anticipate that this generation of students in strategic management research will contribute greatly to the evolving science of organization. We can and should do better.

## Acknowledgements

We thank Raffi Amit, Nick Argyres, Jay Barney, Pam Barr, Bert Cannella, Ming-Jer Chen, Jeanne Connell, Moshe Farjoun, Nicolai Foss, Ranjay Gulati, Don Hambrick, Jinyu He, Connie Helfat, Amy Hillman, Mike Hitt, Gerry Johnson, Anne Marie Knott, Bruce Kogut, Yasemin Kor, Michael Leiblein, Marvin Lieberman, Ravi Madhavan, Alfie Marcus, Kyle Mayer, Rita McGrath, Doug Miller, Will Mitchell, Jackson Nickerson, Joanne Oxley, Laura Poppo, Michael Ryall, Mark Shanley, J.-C. Spender, Michael Tushman, Paul Vaaler, Andy Van de Ven, Gordon Walker, Heli Wang, Jim Westphal, Todd Zenger and the editors for their comments on previous versions of this essay. The authors are solely responsible for the views presented here.

## Notes

- 1 To be sure, in some business schools, strategic management courses are in more demand than ever. But at several flagship schools, our strategic management courses are not performing to previous standards. There are at least seven reasons why this decline has occurred. (1) Several basic frameworks, such as Porter's (1980) approach to competitive strategy, are sometimes taught in the introductory marketing, organizational behavior, entrepreneurship and finance courses, which are typically prerequisites for the introductory strategic management course. (2) The methodological depth in strategic management that has occurred along with the maturity of the field requires greater specialization of empirically minded junior faculty; this methodological depth can work against the success of young scholars interested in the generalist skills and teaching savvy that typically arise from high engagement with companies through field-work. (3) Most fields in business schools go through phases of popularity with practitioners; strategic management courses may now reflect this cycle. (4) The rewards for pedagogical innovation are usually low and in some cases it is even discouraged institutionally. (5) Important questions have changed and the strategic management field has simply not kept up. (6) We frequently do not address the critical problems of managers. (7) We have distanced ourselves from the goal of teaching our business students to develop better judgement (i.e. the approach to critical thinking that characterized the field of business policy), and, as a result, we no longer excite our business students by teaching them how to identify, formulate and frame unstructured problems (Nickerson and Zenger, 2004, deal particularly with this last point).

- 2 To be sure, often such challenges to the strategic management field from within our university communities provide a service for us all to improve our scholarship, which is in the spirit of Sir Isaac Newton's statement that: 'If I have seen further it is by standing on the shoulders of giants.' We are also reminded of a quote from MIT Professor Hal Abelson: 'If I have not seen as far as others, it is because giants were standing on my shoulders.'
- 3 There are, of course, notable exceptions. For example, Knott and Posen (2005) evaluate entry and exit in the banking industry from a public policy perspective; Oster (1999) discusses the unique challenges of strategic management in non-profit organizations; and Ouchi et al. (2005) provide strategic and organization theory insights for improving our public schools. However, we believe that dominant theories in strategic management can be leveraged to a far greater extent for policy implications. For example, research on the behavioral theory of the firm can be applied to public administration; transaction costs theory can be applied to transition economies; property rights can be applied to the firm's institutional environment; agency theory can be applied to a theory of regulation; and issues on dynamic capabilities and absorptive capacity can be (re-)applied to developmental economics (Eckhaus, 1989). We discuss these opportunities in greater depth below.
- 4 We attribute the influence of Porter (1980) in both research and practice to: (1) actionable implications with the manager at center stage; (2) substantive integrity based on four decades of theoretical and empirical research reflecting the structure-conduct-performance paradigm of applied microeconomics in industrial organization; (3) extensive field research; and (4) conceptual and expressive clarity about the connections between institutions (particularly firms) and markets. We believe that these strengths should be celebrated and serve as a model for further contributions. Thanks to Bruce Kogut for challenging us to explain why this work was so influential. See Argyres and McGahan (2002) for further elaboration.
- 5 Since the strategic management field is pluralistic we import and cite works from economics, finance, psychology, sociology and other contiguous disciplines. However, the base disciplines less frequently cite works from our major research journals. In part, that is evidence that we need to do better in producing research that has an impact. That said, those in mature disciplines have less incentive to cite the works of those not in their own specialized field. On balance, we maintain that the pluralistic, open-system model of strategic management that makes us a net importer of ideas contributes to the strength of our strategic management field. We thank Bruce Kogut for bringing this important issue to our attention.
- 6 McGahan and Mitchell (2003) identify these building blocks as architectural and modular capabilities, dynamic capabilities, informational architecture and flows, institutional influences on innovation, learning and routines, mechanisms for transferring learning, models of industry/collective change, network effects, organizational modes of change, dynamic resource-based analysis and rugged landscapes.
- 7 Postrel's (2002: 304) comments on contextualism are noteworthy: 'The central insight of the knowledge perspectives on organizations is that knowledge inputs are necessarily embedded in a context – cognitive and behavioral and social – which powerfully constrains their discovery, their transfer from one set of actors to another, and their usefulness in different situations. This insight, implicitly or explicitly drives discussions of path dependencies in capabilities (Penrose, 1959) (what you already know biases what you are likely to learn next), imitation of others' technologies (Cohen and Levinthal, 1990) (absorbing new ideas requires a basis for prior knowledge), and transfer of best practices from one site to another (Nelson and Winter, 1982; Zander and Kogut, 1995) (routines often rely on a context of tacit cues from other people or from machines, which must be articulated in an understandable way in order to be replicated).'
- 8 Rynes et al. (2001) report a substantial body of research documenting considerable gaps between management research and management practice that corroborate Tushman's views. Tushman et al. (forthcoming) find empirically that action-learning programs (Lewin, 1951; Susman and Evered, 1978) significantly enhance both individual and organizational

- outcomes and maintain that the capability of our executive education programs to create and develop contexts for engaged scholarship is an underdeveloped opportunity for business schools in general and our faculty in particular.
- 9 In a moving and bitter speech delivered at the 2005 Technology, Entertainment, Design (TED) conference, Ashraf Ghani, former Afghanistan finance minister, indicated that modern economic theory – and the policies associated with the theory – had nothing to do with economic reality in Afghanistan (Ghani, 2005).

## References

- Argyres, N. and McGahan, A. M. (2002) 'Michael Porter on Competitive Strategy', *Academy of Management Executive* 16 (May): 41–53.
- Arrow, K. J. (1974) *The Limits of Organization*. New York: W. W. Norton.
- Barnard, C. I. (1938) *The Functions of the Executive*. Cambridge, MA: Harvard University Press.
- Barney, J. B. (2005) 'Should Strategic Management Research Engage Public Policy Issues?', *Academy of Management Journal* 48(6): 945–8.
- Bower, J. L. and Gilbert, C. (2005) *From Resource Allocation to Strategy*. Oxford: Oxford University Press.
- Bowman, E. H. (1990) 'Strategy Changes: Possible Worlds and Actual Minds', in J. Frederickson (ed.) *Perspectives on Strategic Management*, pp. 9–37. New York: Harper.
- Bowman, E. H. and Hurry, D. (1993) 'Strategy through the Options Lens: An Integrated View of Resource Investments and the Incremental-Choice Process', *Academy of Management Review* 18(4): 760–82.
- Bresnahan, T., Greenstein, S. and Henderson, R. (2006) 'Making Waves: The Interplay between Market Incentives and Organizational Capabilities in the Evolution of Industries', working paper, Northwestern University, Evanston, IL.
- Cannella, A. A. and Paetzold, R. L. (1994) 'Pfeffer's Barriers to the Advance of Organizational Science: A Rejoinder', *Academy of Management Review* 19(2): 331–41.
- Coff, R. (1999) 'When Competitive Advantage Doesn't Lead to Performance: Resource-Based Theory and Stakeholder Bargaining Power', *Organization Science* 10(2): 119–33.
- Cohen, W. M. and Levinthal, D. A. (1990) 'Absorptive Capacity: A New Perspective on Learning and Innovation', *Administrative Science Quarterly* 35(1): 128–52.
- Cornell, B. and Shapiro, A. C. (1987) 'Corporate Stakeholders and Corporate Finance', *Financial Management* (Spring): 5–14.
- Cyert, R. M. and March, J. G. (1963) *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice Hall.
- Dewey, J. (1929) *The Quest for Certainty*. New York: Minton, Balch.
- Donaldson, T. and Preston, L. E. (1995) 'The Stakeholder Theory of the Corporation: Concepts, Evidence and Implications', *Academy of Management Review* 20(1): 85–91.
- Drnevich, P. and Shanley, M. (2005) 'Multilevel Issues for Strategic Management Research: Implications for Creating Value and Competitive Advantage', in F. Dansereau and F. J. Yammarino (eds) *Multi-Level Issues in Strategy and Methods*, pp. 117–62. Oxford: Elsevier.
- Eckhaus, R. E. (1989) 'Absorptive Capacity', in J. Eatwell, M. Milgate and P. Newman (eds) *The New Palgrave: Economic Development*, pp. 18–20. New York: W.W. Norton.
- Gavetti, G. and Levinthal, D. A. (2004) 'The Strategy Field from the Perspective of Management Science: Divergent Strands and Possible Integration', *Management Science* 50(10): 1309–18.
- Ghani, A. (2005) 'Remarks at the 2005 TED Conference'. Available online at: [www.ted.com/tedtalks](http://www.ted.com/tedtalks)
- Gulati, R., Nohria, N. and Zaheer, A. (2000) 'Strategic Networks', *Strategic Management Journal* 21(3): 203–13.

- Hambrick, D. (1994) 'What if the Academy Actually Mattered?', *Academy of Management Review* 19(1): 11–16.
- Hart, O. (1995) *Firms, Contracts, and Financial Structure*. Oxford: Clarendon Press.
- Henisz, W. J. and Zelner, B. A. (2003) 'The Strategic Organization of Political Risks and Opportunities', *Strategic Organization* 1(4): 451–60.
- Hoskisson, R. E., Hitt, M. A., Wan, W. P. and Yu, D. (1999) 'Theory and Research in Strategic Management: Swings of a Pendulum', *Journal of Management* 25(3): 417–56.
- Huff, A. S. (2000) 'Changes in Organizational Knowledge Production', *Academy of Management Review* 25(2): 288–93.
- Itami, H. and Roehl, T. (1987) *Mobilizing Invisible Assets*. Cambridge, MA: Harvard University Press.
- Kaplan, A. (1964) *The Conduct of Inquiry: Methodology for Behavioral Science*. San Francisco, CA: Chandler Publishing.
- Knott, A. M. and Posen, H. E. (2005) 'Is Failure Good?', *Strategic Management Journal* 26(7): 617–41.
- Kochan, T. A. and Rubinstein, S. A. (2000) 'Toward a Stakeholder Theory of the Firm: The Saturn Relationship', *Organization Science* 11(4): 367–86.
- Kogut, B. (1991) 'Joint Ventures and the Option to Expand and Acquire', *Management Science* 37(1): 19–33.
- Kreps, D. and Baron, J. (1999) *Strategic Human Resources: Frameworks for General Managers*. Hoboken, NJ: Wiley.
- Kuhn, T. S. (1962) *The Structure of Scientific Revolutions*. Chicago, IL: University of Chicago Press.
- Lewin, K. (1951) *Field Theory in Social Science: Selected Theoretical Papers*. New York: Harper.
- Li, Y., James, B., Madhavan, R. and Mahoney J. T. (forthcoming) 'Real Options: Taking Stock and Looking Ahead', *Advances in strategic management*.
- McGahan, A. M. (2004) *How Industries Evolve*. Boston, MA: Harvard Business School Publishing.
- McGahan, A. M. (2006) 'What is Sustainability?', working paper, Boston University, Boston, MA.
- McGahan, A. M. and Keller, G. (1995) 'Saturn: A Different Kind of Car Company', HBS Case Clearinghouse 9-795-010. Boston, MA: Harvard Business School Publishing.
- McGahan, A. M. and Mitchell, W. F. (2003) 'How Do Firms Change in the Face of Constraints to Change? Toward an Agenda for Research in Strategic Organization', *Strategic Organization* 1(2): 231–9.
- McGahan, A. M. and Silverman, B. S. (forthcoming) 'Profiting from Others' Technological Innovation: The Effect of Competitor Patenting on Firm Value', *Research Policy*.
- Mahoney, J. T. (1993) 'Strategic Management and Determinism: Sustaining the Conversation', *Journal of Management Studies* 30(1): 173–91.
- Mahoney, J. T. (2005) *The Economic Foundations of Strategy*. Thousand Oaks, CA: Sage Publications.
- Mahoney, J. T. and Sanchez, R. (2004) 'Building New Management Theory by Integrating Processes and Products of Thought', *Journal of Management Inquiry* 13(1): 34–47.
- Marcus, A. (forthcoming) 'Youth Bulges and Terrorism: Lethal Events and Complex Theories', *Journal of International Business Studies*.
- Miller, G. J. (1992) *Managerial Dilemmas: The Political Economy of Hierarchy*. New York: Cambridge University Press.
- Nelson, R. R. and Winter, S. G. (1982) *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.
- Nickerson, J. and Zenger, T. (2004) 'A Knowledge-Based Theory of Governance Choice: The Problem Solving Approach', *Organization Science* 15(6): 617–32.
- North, D. C. (1990) *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press.
- Oster, S. M. (1999) *Strategic Management of Nonprofits*. New York: Oxford University Press.

- Ouchi, W., Riordan, R., Lingle, L. and Porter, L. (2005) 'Making Public Schools Work: Management Reform as the Key', *Academy of Management Review* 48(6): 929–40.
- Penrose, E. T. (1959) *The Theory of the Growth of the Firm*. New York: John Wiley & Sons.
- Porter, M. E. (1980) *Competitive Strategy: Techniques for Analyzing Industry and Competitors*. New York: Free Press.
- Post, J. E., Preston, L. E. and Sachs, S. (2002) *Redefining the Corporation: Stakeholder Management and Organizational Wealth*. Stanford, CA: Stanford Business Books.
- Postrel, S. (2002) 'Islands of Shared Knowledge: Specialization and Mutual Understanding in Problem Solving Teams', *Organization Science* 13(3): 303–20.
- Postrel, S. and Rumelt, R. P. (1992) 'Incentives, Routines, and Self-Command', *Industrial and Corporate Change* 1(3): 397–425.
- Reuf, M. (2003) 'A Sociological Perspective on Strategic Organization', *Strategic Organization* 1(2): 241–51.
- Roberto, M.A., Bohmer, R., Edmondson, A., Ferlins, E. and Feldman, L. (2005) 'Columbia's Final Mission (Multimedia Cse)' Harvard Business School Case Study 305-032.
- Rumelt, R. P., Schendel, D. E. and Teece, D. J., eds (1994) *Fundamental Issues in Strategy*. Boston, MA: Harvard Business School Press.
- Rynes, S. L., Bartunek, J. M. and Daft, R. L. (2001) 'Across the Great Divide: Knowledge Creation and Transfer between Practitioners and Academics', *Academy of Management Journal* 44(2): 340–55.
- Schumpeter, J. A. (1954) *History of Economic Analysis*. New York: Oxford University Press.
- Scott, W. R. (1995) *Institutions and Organizations*. Thousand Oaks, CA: Sage Publications.
- Selznick, P. A. (1957) *Leadership in Administration*. Berkeley, CA: University of California Press.
- Shanley, M. and Peteraf, M. (2007) 'The Centrality of Process', *International Journal of Strategic Change Management* 1(1): 4–19.
- Shleifer, A. and Vishny, R. W. (2002) *The Grabbing Hand: Government Pathologies and Their Cures*. Cambridge, MA: Harvard University Press.
- Simon, H. A. (1947) *Administrative Behavior*. New York: Macmillan.
- Simon, H. A. (1982) *Models of Bounded Rationality: Behavioral Economics and Business Organization*. Cambridge, MA: MIT Press.
- Smith, A. (1776) *The Wealth of Nations*. New York: Methuen.
- Susman, G. and Evered, R. (1978) 'An Assessment of the Scientific Merits of Action Research', *Administrative Science Quarterly* 23(4): 582–603.
- Trigeorgis, L. (1996) *Real Options: Managerial Flexibility and Strategy in Resource Allocation*. Cambridge, MA: MIT Press.
- Tripsas, M. and Gavetti, G. (2000) 'Capabilities, Cognition and Inertia: Evidence from Digital Imaging', *Strategic Management Journal* 21(10–11): 1147–61.
- Tukey, J. W. (1962) 'The Future of Data Analysis', *Annals of Mathematical Statistics* 33(1): 1–67.
- Tushman, M. L., Reilly, C. A., Fenollosa, A., Kleinbaum, A. M. and McGrath, D. (forthcoming) 'Towards Relevance and Rigor: Executive Education as a Lever in Shaping Practice and Research', *Academy of Management Learning and Education*.
- Van de Ven, A. (2002) 'Strategic Directions for the Academy of Management', *Academy of Management Review* 27(2): 171–84.
- Van de Ven, A. (forthcoming) *Engaged Scholarship: Creating Knowledge for Science and Practice*. New York: Oxford University Press.
- Villalonga, B. and McGahan, A. M. (2005) 'The Choice among Acquisitions, Alliances, and Divestitures', *Strategic Management Journal* 25(13): 1183–1208.
- Walsh, J. P., Meyer, A. D. and Schoonhoven, C. B. (2006) 'A Future of Organization Theory: Living in and Living with Changing Organizations', *Organization Science* 17(5): 657–71.
- Wang, H. and Barney, J. B. (2006) 'Employee Incentives to Make Firm-Specific Investments: Implications for Resource-Based Theories of Corporate Diversification', *Academy of Management Review* 31(2): 466–76.

- Weick, K. E., Sutcliffe, K. M. and Obstfeld, D. (2005) 'Organizing and the Process of Sense-making', *Organization Science* 16(4): 409–21.
- Williamson, O. E. (1975) *Markets and Hierarchies*. New York: Free Press.
- Williamson, O. E. (1985) *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*. New York: Free Press.
- Williamson, O. E. (1996) *The Mechanisms of Governance*. New York: Oxford University Press.
- Zander, U. and Kogut, B. (1995) 'Knowledge and the Speed of the Transfer and Imitation of Organizational Capabilities: An Empirical Test', *Organization Science* 6(1): 76–92.
- Zingales, L. (2000) 'In Search of New Foundations', *Journal of Finance* 55(4): 1623–53.

---

**Joseph T. Mahoney** is Professor of Strategic Management at the College of Business of the University of Illinois at Urbana-Champaign. His credits include a book and over 35 articles on strategic issues and organizational economics. He has taught courses to undergraduates, MBA candidates, executives and doctoral students. Executives have voted him Executive MBA Professor of the Year five times. His research focuses on the behavioral theory of the firm; transaction costs theory; agency theory; dynamic resource-based theory, real options theory, and stakeholder and property rights theory. Address: Department of Business Administration, College of Business, University of Illinois at Urbana-Champaign, 140C Wohlers Hall, 1206 South Sixth St, Champaign, IL 61820, USA. [email: josephm@uiuc.edu]

**Anita M. McGahan** is Professor and Everett W. Lord Distinguished Faculty Scholar at the Boston University School of Management, is also a Senior Associate at the Institute for Strategy and Competitiveness at Harvard University. Her credits include two books and over 60 articles and case studies on strategic issues of competitive advantage, industry evolution and financial performance. She is pursuing a long-standing interest in the inception of new industries and in the implications for comparative advantage and international development. She has taught courses in strategy and history to MBA candidates, executives and doctoral students at both Boston University and the Harvard Business School, and has been elected by her students as Professor of the Year repeatedly. She has developed five new business-school courses (both required and elective) over the last seven years, each of which has earned very high ratings and achieved strong – even unprecedented – popularity. Address: School of Management, Boston University, 595 Commonwealth Avenue, Boston, MA 02215, USA. [email: amcgahan@bu.edu]

---