

Proposal for a Strategic Management Journal Special Issue

Strategies for Orchestrating Innovative Solutions to Grand Challenges

Background

Research in strategic management has been central to understanding how enterprising individuals and firms design and execute self-sustaining innovative solutions within markets to address socioeconomic needs. Within market-based economies, firms are the traditional engines of innovation, operating within the institutions created and enforced by governments to address socioeconomic needs. Such private-sector innovation has catalyzed notable advances and created positive social benefits in a range of fields including agriculture, education, energy, health, poverty alleviation, and security.

Increased attention to grand challenges has elevated the need to envision and orchestrate innovative solutions and technological adaptations for addressing them. Grand challenges are complex societal problems whose solutions are perceived to be time-urgent, critical, and impactful for addressing unmet needs in society. Today, there are at least three distinct views about the roles and responsibilities of firms, governments, and related stakeholders in orchestrating the efforts toward innovative solutions to grand challenges.

The first view rests on the belief that firms are unable or unwilling to adequately innovate and tackle grand challenges. It has created calls for governments to become entrepreneurial states. This view advocates that governments orchestrate innovative solutions for desired scale and impact. Public agencies are asked to set agendas, prioritize missions, directly select technologies, and provide funding to selected recipients (e.g., the establishment of ARPA-E and ARPA-H for selected energy and health priorities).

The second view is optimistic about the private sector, highlighting the challenges that governments face in mobilizing appropriate expertise and incentives. It is also supported by the history of the private sector's frequent success at solving challenges that had been assumed to fall under the purview of government due to the required innovative and operational scale and scope. These include large-scale commercial continuation of past government projects (e.g., satellite constellations and space tourism) or private investment to replace failed government projects (e.g., revived supersonic aviation after Concorde failure; accessible banking and mobile money after non-emergence in a handful of countries).

The third view, arising from the confluence of technological and socioeconomic issues, advocates for institutional and regulatory intervention in markets to influence technological directions and responsible innovation. Based on a normative evaluation of technologies, this view calls for firms to revisit business models and technologies and for governments to alter institutions to incentivize specific directions (e.g., privileging organic farming and abandoning genetically modified food).

These views about the nature of innovative solutions and the strategies for orchestration have opened critical new questions and debates regarding *who* is best positioned to take on *what* strategies or activities for *which* problems, within *what* organizational or coordinating modes. These questions and debates stand to benefit from focused research by strategy, innovation, and entrepreneurship scholars. Specially, these views invite a closer examination of how firms, the dominant purview of strategic management research, may play an understudied and underappreciated role.

First, the consequences, tradeoffs, and execution of these three views for tackling grand challenges remain underexplored. Comparative analysis can provide a holistic perspective, including identifying and investigating

underlying assumptions embedded in these views. Importantly, it can outline how each view deviates from the traditional principles of strategic management, what other principles are replaced, and what costs and benefits are embedded within each view. Further, this directs attention to the unintended strategic consequences of alternative views, their alignment with other system-wide elements, firms' strategic adjustments to each view, and the potential uneven effects on different global actors.

Second, different challenges may differ in their salience and variance within the underlying population. Such differences imply that scholars should direct rigorous attention to questions such as for whom, by whom, how and when are innovative solutions provided. An explicit recognition of these differences opens the study of whether and how self-interested actors can frame their preferences as being in the public interest to create perceived urgency. Moreover, within a global context, variation across countries in the manifestation of grand challenges may itself relate to the roles played by firms and governments, and differences in market-supporting institutions. These issues deserve scholarly attention to shed light on the efficacy, benefits, and drawbacks of alternative views.

To address the above research gaps, the strategic management field needs rigorous empirical studies to assess whether and how each alternative view works, as well as the circumstances under which each view presents a comparative advantage over others. To avoid misleading inferences about the effectiveness of various views, a comparison with possible counterfactual solutions is essential. Further, inferences in favor of each view need to derive from considering the entire sample of successful and failed observations that were subject to that intervention, instead of disproportionate emphasis being placed on successful outlier cases. Similarly, given the long-term and system-wide impact of solutions, longitudinal empirical investigations across multiple units of analysis and outcomes can add to the scholarly rigor for managerial and policy implications.

Aims and Scope

The goal of this special issue is to explore the importance and value of firms and actors operating within markets to tackle grand challenges, with a focus on the strategic orchestration of innovative solutions. We encourage theory-driven or theory-building submissions that provide robust and rigorous empirical evidence about these themes. We welcome deductive, inductive, or abductive studies using quantitative or qualitative data. Purely conceptual and theoretical papers are out of scope of the special issue.

Some possible areas of interest are exemplified by the research questions below.

- What role do firms play in innovating for historical and modern grand challenges? What strategic management principles, in terms of both cooperation and competition, have enabled firms to address grand challenges, or restricted them from doing so? When do firms refrain from or invest in allocating their private resources to finding solutions to grand challenges? How does heterogeneity in resources and strategies influence firms' likelihood and approach in tackling grand challenges?
- What factors influence the government's initiation of missions to innovate for grand challenges? What forms do government missions and public-private partnerships take? What are the implications for value creation and capture across metrics, actors, and units of analysis? How do government missions interact with firm entry in a nascent industry, scaling and survival in a growing industry, or incumbent-entrant dynamics in evolving contexts? How does prioritization of a mission influence the level and direction of firms' experimentation in alternative technologies and directions?
- Beyond the strategic actions of firms and governments, what other actors and coordinating modes can facilitate or stifle tackling grand challenges? What role can nonprofit organizations, academic institutions,

or industry associations play in initiating and coordinating partnerships to address grand challenges? What organizational, institutional, and technological factors facilitate the potential of different actors to innovate for grand challenges? How may motives, processes, and outcomes differ across these actors and coordinating modes? What are the advantages and disadvantages of these alternatives?

- When firms consider innovating to tackle grand challenges, regardless of whether they pursue it independently or as part of a public-private partnership, which strategies do they pursue? How do their strategies change? How does the pursuit of an innovative solution interact with their announcement of organizational purpose? How do they adjust their competitive and corporate strategy, organizational structure, knowledge and strategic human capital practices, and managerial incentives?
- When multiple actors join forces, how do governance and attributes of coordinating modes and partnerships matter for the potential to meet grand challenges and to provide self-sustaining strategic opportunities for involved actors? What are the consequences of a coordinated collective action wherein selected actors are mandated to pursue the same direction, versus a decentralized collective action wherein diverse actors engage in independent and parallel experimentation for the same challenge?
- When and how do the interactions between firms and governments redirect, displace, or appropriate efforts to address grand challenges? What strategies do firms pursue in transforming a grand challenge to a competitive advantage? For example, do firms attempt to create a perceived urgency or support for technological trajectories that sustain their private competitive advantage? What approaches do governments and political actors use in mobilizing stakeholders toward an elevated perception of a grand challenge?
- What are the merits, adverse effects, and implementation obstacles for tackling grand challenges in the global scale? How do local versus global firms as well as local governments versus international players differently prioritize various perceived challenges and allocate resources in finding solutions? When and how do innovative solutions, public-private partnerships, or individual firm efforts diffuse across borders and sustain in new country environments?

Guest Editors

Rajshree Agarwal

- Rajshree Agarwal is the Rudolph Lamone Chair of Strategy and Entrepreneurship and Director of the Ed Snider Center for Enterprise and Markets at the University of Maryland. Rajshree studies the evolution of industries, firms, and individual careers, as fostered by the twin engines of innovation and enterprise. She routinely publishes in leading journals in strategy and entrepreneurship. An author of more than 70 studies, her research has been cited more than 15,000 times, has received numerous best paper awards, and has been funded by grants from various foundations, including the Kauffman Foundation, the Rockefeller Foundation, and the National Science Foundation.
- She is currently the co-editor of the Strategic Management Journal and has previously served in co-editor and senior editor roles at Strategic Entrepreneurship Journal and Organization Science respectively. Rajshree has received numerous awards for her scholarship and mentorship, including the “University Scholar” Award at the University of Illinois and the Distinguished Scholar-Teacher Award at the University of Maryland.

Mahka Moeen

- Mahka Moeen is an associate professor of strategy and entrepreneurship and Sarah Graham Kenan Scholar at UNC's Kenan-Flagler Business School. She studies how entrepreneurs and firms create and enter nascent industries, with a focus on strategies that firms undertake during early incubation industry stages. Her

research has been published in *Strategic Management Journal*, *Organization Science*, *Strategy Science*, and *Strategic Entrepreneurship Journal*. This research program has been recognized by awards from the Kauffman Foundation, Strategy Research Foundation, Academy of Management's TIM Division, Industry Studies Association, and the Schulze Foundation. She is a double Poets & Quants award winner, named as one of the 40 Best Business School Professors Under the Age of 40 in 2022 and as one of the top 50 Undergraduate Business Professors in 2020.

- Mahka serves as a Senior Editor of *Organization Science*, and she is on the Editorial Boards of *Strategic Management Journal*, *Strategy Science*, and *Strategic Entrepreneurship Journal*. She serves as a co-chair of Strategy Research Foundation within the Strategic Management Society and the Executive Committee of the STR Division of the Academy of Management.

Pinar Özcan

- Pinar Ozcan is Professor of Entrepreneurship and Innovation at the Saïd Business School, University of Oxford. She is also the Director of the Entrepreneurship Centre at the Saïd Business School. Her research interests lie at the intersection of entrepreneurship, innovation, and strategy. Pinar's research has been published in leading academic journals, including the *Academy of Management Journal*, *Strategic Management Journal*, *Journal of Management Studies*, *Strategy Science*, *Research Policy* and *Global Strategy Journals*. She currently serves as an Associate Editor at *Strategic Entrepreneurship Journal*.
- Pinar is the recipient of numerous awards including the IDEA Entrepreneurship Thought Leader Award, the 2015 British Academy Newton Grant for open innovation, the 2016 Best Conference Paper Award at Strategic Management Society, the 2017 Top 40 Business School Professors under 40 list by Poets and Quants, the 2018 Strategic Management Society Research in Organizations Award and the 2019 British Academy Mid-Career Fellowship.

Karl Wennberg

- Karl Wennberg is Professor of Management and the Barbara Bergström Chair in Educational Leadership and Excellence at the Stockholm School of Economics, Sweden. His interdisciplinary research focuses on entrepreneurship and innovation policy as well as labor and education economics. He is the author of several books and over 60 scholarly articles in journals such as *Management Science*, *Journal of International Business Studies*, *Journal of Business Venturing*, *Research Policy*, *Strategic Entrepreneurship Journal*, and *Proceedings of the National Academy of Sciences*.
- Karl is a senior editor at *Entrepreneurship Theory & Practice*, a former field editor at the *Journal of Business Venturing* and has been a special issue editor at *Strategic Entrepreneurship Journal*. His work has received several academic awards from the Academy of Management and has been cited more than 9,000 times.

Proposed Timeline:

- July 1, 2023: Release the call for submissions and subsequent promotion
- July 1, 2024: First submission deadline
- August 1, 2024: Desk rejections issued, and reviewer assignments completed
- December 1, 2024: First round decisions issued
- March 1, 2025: Submission deadline for first revisions
- June 1, 2025: Second round decisions issued
- October 1, 2025: Submission deadline for second revisions
- January 1, 2025: Final decisions and conditional acceptance issued

- March 1, 2025: Submission deadline for final revisions
- May 1, 2025: Finalize the content and editorial introduction essay
- July 2026: Special issue release