MID-RANGE MANAGEMENT THEORY

Competence Perspectives on Modularity and Dynamic Capabilities

Edited by

Ron Sanchez, Aimé Heene, Seçkin Polat and Umut Asan

RESEARCH IN COMPETENCE-BASED MANAGEMENT

VOLUME 8

MID-RANGE MANAGEMENT THEORY: COMPETENCE PERSPECTIVES ON MODULARITY AND DYNAMIC CAPABILITIES

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INTRODUCTION

Ron Sanchez, Aimé Heene, Seçkin Polat, and Umut Asan, Editors

The avowed goal of the Competence-Based Management (CBM) movement since its beginnings in the 1990s has been the development of a body of theory that is both scientifically rigorous and at the same time directly applicable to the practice of management. Pursuit of this goal has led CBM researchers to introduce a new conceptual foundation for developing management theory, to employ a range of standard and novel empirical research methods, and to assist forward-thinking managers in implementing innovative management approaches.

One broad finding to emerge from nearly a quarter century of CBM research within the overall stream of research in management is that the search for "grand theory" in conventional research in management – i.e., theory that is uniformly applicable to all management contexts – has fallen on the horns of a seemingly intractable generality–particularity dilemma. Simply put, management theory that is intended to be generally applicable to all management contexts – and that is therefore articulated at a high level of generality – almost invariably proves problematic to apply to particular situations. The logical impossibility of applying the broad generalities and superficially plausible logic of the "resource-based view" (Barney 1991) to identifying strategically valuable resources *ex ante* is a well-known case in point (Sanchez 2010).

The dilemmas of conceptual definition and relational logic implicit in any effort to develop grand theory have led many, if not most, CBM researchers to pursue development of *mid-range theory* – theory whose foundational concepts, key causal relationships, and resulting explanations and predictions are intended to address specific kinds or categories of management contexts.

In this volume we bring together a set of CBM papers that first explain mid-range theory and then illustrate mid-range theory research approaches applied to key issues in *dynamic capabilities* and *modularity*.

The volume begins with a paper by Ron Sanchez and Aimé Heene on *Building Theory for Management Science and Practice: An Epistemological Perspective from Competence-Based Management Theory.* The authors elaborate and contrast the intent and methods of grand theory *versus* mid-range theory building processes. They then explain the generality–particularity dilemma that afflicts various ideas aspiring to become grand theory in management today, most notably the "resource-based view." The authors then suggest that refocusing research in management on developing mid-range theory may not only lead to theory that is directly applicable in specific management contexts, but may also lay the foundation for future integration of contextual mid-range theories that could give rise to grand theory that is applicable across management contexts.

In the second paper in the volume, Ayberk Soyer, Sezi Çevik Onar, and Ron Sanchez examine the challenge of *Overcoming Path Dependency and* 'Lock-In' in Competence Building and Competence Leveraging Processes. The authors argue that to achieve sustained competitive success, a firm must be able to apply its current competences well, while also continuously renewing its competence base. They suggest, however, that self-reinforcing managerial and organizational mechanisms can arise from a firm's competence leveraging processes that may work against launching and sustaining competence renewal processes. The authors focus on certain managerial behaviors that may create path dependencies that result in an organization becoming "locked-in" to its current competence leveraging, resulting in failure to renew competences and eventually in competitive failure. They suggest ways in which firms can build dynamic capabilities that can avoid lock-ins caused by self-reinforcing managerial behaviors. A case study of successful competence-renewing processes provides insights into the nature of such dynamic capabilities.

Managing processes for both competence leveraging and competence building requires that managers be able to identify both a firm's current competences and the new competences their firms could build. In their paper *Identifying Competences and Their Sources in a Not-For-Profit Organization: The Case of a Humanitarian Relief Organization,* Diego Vega and Ron Sanchez argue that not-for-profit organizations have essentially the same *systemic* requirements for survival and success as for-profit organizations. They then report a case study of competence identification and analysis in Médecins Sans Frontières (MSF), a highly successful, global humanitarian relief organization. Analysis of the systems created by MSF for responding quickly to life-and-death crises around the world not only identifies key processes and enabling capabilities that are the basis for MSF's much-admired

Introduction

competence in humanitarian relief, but also suggests a systems-analysis methodology for identifying competences in any organization.

To build new competences, organizations must be willing to undergo organizational change-often significant and even fundamental organizational change. Managing fundamental change in an organization requires leadership from management from the "top" (boards of directors) down to managers at the working level. In their paper on Building Sustainability Competence from the Top Down: A Model for Researching and Improving Boards of Directors' Influence on Firms' Sustainability Performance, authors Ron Sanchez, Jeremy Galbreath, and Gavin Nicholson develop a model for researching how a board of directors may influence an organization's ability to build new social and environmental sustainability competence. Their model explores how two forms of board capital (a board's human capital and its social capital) and three aspects of a board's information processing (its patterns of information search, discussion and debate, and information absorption) are likely to affect the sources of *cognitive flexibility* that a board needs to recognize and respond to a need for improved sustainability performance. They also suggest how an organization's *strategic flexibility* – as represented by its current endowments of resource flexibilities and coordination flexibilities - may moderate the relationship between a board's decision to adopt sustainability performance goals and an organization's subsequent achievement of those goals. The authors further suggest that the model they develop in their paper may also be used to research the influence of boards on many, if not all, forms of strategic organizational change.

Building new competences requires not just a capability to manage organizational change, but also a capability for identifying the new competences an organization should build. In their paper on *Roadmap-Based Methodology for the Forecasting of Competences within Automotive Product Development*, Albert Albers, Lukas Krämer, and Masis Arslan suggest how ongoing processes for systematic identification and analysis of strategic gaps in a firm's current competences (compared to the competences it will need in the future) can lead to clear identification of new *capabilities* the firm needs to acquire or develop. Their paper describes a roadmap-based methodology for forecasting an organization's future competence needs – and from that, identifying the specific capabilities a firm will need in order to have the competence(s) to meet expected market demands in the future. This methodology is illustrated through a case of a German luxury car manufacturer who uses a modular architectural framework for identifying and analyzing capabilities present and future.

Finally, in their paper Modularity in New Market Formation: Lessons for Technology and Economic Policy and Competence-Based Strategic Management, Ron Sanchez and Chang Chieh Hang appraise the ways in which use of closed-system proprietary product architectures versus opensystem modular product architectures may influence the dynamics and resulting trajectories of development and growth in new product markets. They compare the evolutions of new markets in China for (i) gas-powered twowheeled vehicles and (ii) electric powered two-wheeled vehicles to suggest that new product markets based on proprietary product architectures versus opensystem modular architectures are likely to result in very different patterns and speeds of new market formation. They then suggest that new product markets based on open-system modular product architectures call for new approaches to the strategic management of innovation and product creation. They also suggest that technology and economic development policies that favor use of open-system modular architectures may provide important new stimulus to new market formation and related economic development, as well as enabling bottom-of-the-pyramid innovation processes, frugal engineering, and development of low-cost product variations for developing economies.

Taken together, the papers included in this volume confirm the power of the CBM perspective to deliver fundamental contributions to future-oriented, predictive strategic management theory, research, and practice by presenting rigorous and relevant mid-range theory and research approaches applied to dynamic capabilities and modularity.