The Middle Management Perspective on Strategy Process: Contributions, Synthesis, and Future Research

Bill Wooldridge*

Isenberg School of Management, University of Massachusetts-Amherst, Amherst, MA 01003

Torsten Schmid

Institute of Management, University of St. Gallen, 9000 St. Gallen, Switzerland

Steven W. Floyd

Institute of Management, University of St. Gallen, 9000 St. Gallen, Switzerland

During the past 25 years, a substantial amount of research in strategic management has focused on the contributions of middle management. Although useful, the research is characterized by considerable diversity in terms of focal constructs and relationships. The purpose of this review is to organize this research and identify important constructs, relationships, and contributions. The review serves not only to catalog the state of the art and accumulate knowledge; it also facilitates the critique necessary for charting directions and enhancing the cumulative nature of future research.

Keywords: middle managers; strategy process; middle management perspective; strategy formation

During the past 25 years, the scope of strategy process research has been expanded to include not only top managers but also middle managers and other mid-level professionals whose activities and behaviors have important consequences for how strategy forms within organizations. Research focused on middle managers has added much to our understanding

*Corresponding author: Tel.: 413-545-5697

E-mail address: wooldridge@mgmt.umass.edu

of strategy and change and offers great promise for generating future insight. The roles and influence of middle managers have been studied in research on corporate entrepreneurship (Bower, 1970; Burgelman, 1983b), innovation and organizational learning (Kanter, 1982; Nonaka, 1994; Nonaka & Takeuchi, 1995); strategy implementation (Balogun & Johnson, 2004; Guth & MacMillan, 1986; Huy, 2002), and strategy-making processes (Currie & Procter, 2005; Dutton & Ashford, 1993; Floyd & Lane, 2000; Pappas & Wooldridge, 2007; Wooldridge & Floyd, 1990). Although research questions vary widely, this work shares the premise that middle managers are central to explaining key organizational outcomes. That is, this research takes what we call a "middle management perspective."

Several motivations have been described in the literature as the basis for a middle management perspective (Floyd & Wooldridge, 2000), three of which we highlight here. First, because of their intermediate position in the organization, middle managers serve as important interfaces between otherwise disconnected actors and domains (Floyd & Wooldridge, 1999; Nonaka, 1991), for example, top and operating-level managers. Whereas early acknowledgments of this influential position focused on managers as sources of resistance (e.g., Guth & MacMillan, 1986), later accounts highlighted their potential as agents of change (e.g. Huy, 2002). Second, as a complement to the view of elites as a key source of influence on organizational outcomes (Hambrick & Mason, 1984), middle management research posits an alternative model of managerial agency and strategic choice. This view acknowledges that complex, geographically dispersed organizations cannot be managed by single actors or even small groups but require distributed and interactive leadership throughout the organization, with middle managers as important mediators between levels and units (e.g., Balogun & Johnson, 2004). Third, research suggests middle managers are more likely than top managers to penetrate the causal ambiguities surrounding relationships between an organization's capabilities and its economic performance (King & Zeithaml, 2001). As a result, they may play a greater role than top managers in activities associated with capability development. Put differently, middle management is a necessary point of observation from which to study the organizational process associated with building and renewing capabilities.

In 1984, Hambrick and Mason articulated the need for an upper echelons or top management team (TMT) perspective. Their article stimulated considerable research, and it can be argued that this body of work represents some of the most coherent and cumulative research in the organizational sciences. In contrast, the cumulative impact of research from a middle management perspective is less apparent. To a large degree, this is due to differences in how certain issues have been approached from a middle management perspective as compared to the upper echelons perspective. First, upper echelons research is clear about what upper echelons means—the senior executives who make up firms' dominant coalition (Carpenter, Geletkanycz, & Sanders, 2004). In contrast, identifying the most strategically influential and relevant mid-level professionals in an organization is more problematic, and understanding why some middle managers are involved in and influence the process more than others remains an important research issue (e.g., Pappas & Wooldridge, 2007). Second, for the most part, TMT research assumes that the role of the TMT is to make strategic decisions. The interactions and processes that underlie TMT decisions have generally been left in a "black box" (Carpenter et al., 2004). In contrast, work from a middle-level perspective views strategy making as a social learning process, and rather than keeping the process in a black box, exploring the strategy-making process to understand how managers are involved in and influence strategy is a key part of middle management research. Finally, because of its heightened focus on process, identifying and understanding outcomes relevant to the middle management perspective is more problematic than identifying outcomes relevant to top management decisions. Although both perspectives make linkages to outcomes affecting the organization as a whole, TMT research focuses exclusively on such effects, whereas middle management research is also concerned with intermediate outcomes such as subunit performance and initiative development.

Given this added complexity, it is not surprising that strategy research from a middle management perspective has addressed a wide variety of issues and used a variety of methodological approaches. This has led to a somewhat fragmented stream of research whose cumulative impact is often difficult to discern. The purpose of this review is to organize this research and identify important constructs, relationships, and contributions. The review serves not only to catalog the state of the art and accumulate knowledge; it also facilitates the critique necessary for charting directions and enhancing the cumulative nature of future research.

The focus of our review is research that investigates middle management's role in strategy formation. This focus is informed by, but deliberately excludes, managerial work studies that examine middle managers' more general job requirements and status (for a review, see, e.g., Dopson & Stewart, 1990). We focus exclusively on *strategy* research where middle management is a unit of analysis in theory development or a point of observation for empirical study. We believe the advantage of this perspective stems from its potential to advance our understanding of intraorganizational processes underlying strategy formation in complex settings, including organizational learning and change. We draw on these adjacent literatures to describe the context for middle management, but change and organizational learning are much broader domains. Our review draws on this work only to the extent that it informs the middle management perspective. This sets a boundary condition, on one hand, but it also yields insight into how research in the broader domains may be advanced from a more specialized perspective.

In the literature reviewed here, the term *middle management* is understood rather broadly. It extends to managers located below top managers and above first-level supervision in the hierarchy (e.g., Dutton & Ashford, 1993; Uyterhoven, 1972). The distinguishing feature of middle management, however, is not where they sit in the organization chart. Rather, what makes middle managers unique is their access to top management coupled with their knowledge of operations. It is this combination that enables them to function as mediators between the organization's strategy and day-to-day activities (Nonaka, 1994). Such a functional designation comprises different types of mid-level professionals, including general line managers (e.g., divisional or strategic business unit heads), functional line managers (e.g., vice presidents of marketing) and team- or project-based executives (e.g., leaders of strategic initiatives).

The remainder of this article is organized as follows. First, we provide a brief historical account of how literature on the strategy process evolved to support a middle management perspective. We think describing the historical roots of this perspective is important to understanding how it has developed and where it might be going. We then provide a review of existing theory and research organized around behavioral and cognitive accounts that have been offered to explain middle management influence in strategy making and to identify the

	Choice Perspective	Social Learning Perspective
Intellectual roots	Chandler (1962); Child (1972); Ansoff	Mintzberg (1978), Bower (1970), Kanter
	(1965), Andrews (1971), M. Porter	(1982), Schilit (1987), Burgelman
	(1980), Hambrick & Mason (1984)	(1983a, 1983b)
Process model	Decision making	Social learning process
Key actors	Top management team	Multiple actors with middle managers as important mediators between levels and units
Process mechanisms	Analysis, decision making, and implementation	Generating ideas, initiative taking, strategic reintegration
Context	Complexity manageable by one central actor or team	Complexity beyond single actor's ability to integrate fragmented power and knowledge base

Table 1
Foundations of the Choice and Social Learning Perspectives in Strategy

consequences of such influence for organizational outcomes. On the basis of this review, we propose a framework to integrate existing contributions and to guide future research. This becomes the basis for our discussion of high-priority research questions and important theoretical and methodological challenges facing scholars in this domain.

Foundations of the Middle Management Perspective

The recognition in the research literature of middle management's relevance to strategy began in the 1970s. Up to that point, conceptualizations of management generally, and strategy in particular, assumed a top-down analytical process that separated decision making from action. As Table 1 shows, this upper echelons perspective grew out of the strategy field's intellectual roots in economics and organizational theory. From these early foundations emerged a model of strategy making shown in the table as the "choice perspective." Here, strategy making is assumed to be a decision-making process involving one top manager or a relatively small group of upper-level actors, and the central questions revolve around how to formulate and implement high-quality strategic decisions. From the choice perspective, the role of middle managers in the formulation of strategy is limited to providing input. The primary role of middle management from this perspective is implementing strategy.

The distinction between formulation and implementation that is central in the choice perspective became one of the launching points for Mintzberg's (1978) seminal critique of the early literature. Mintzberg maintains that separating formulation from implementation imposes a false division of work between top managers (i.e., thinking) and other organizational members (i.e., doing) in strategy formation. Mintzberg's (1978) own framework begins with a focus on realized strategy, the actual pattern of actions and decisions in the organization. He argues that realized strategy forms from emergent influences at middle and lower levels of the organization, as well as from deliberate influences emanating at the top (Mintzberg & Waters, 1985). Strategy making from this perspective is less a process of choice and more a matter of social learning, that is, managers and others in the organization

learning how to adapt to a changing environment. This view opens up the strategy process for substantive, emergent influence by middle managers.

Mintzberg was not alone in recognizing an expanded role for middle-level actors in strategy development. Bower (1970) and Kanter (1982) both provided richly detailed, book-length case studies of middle managers defining as well as implementing strategy. Schilit and Locke (1982) were also early to recognize the importance of upward influence by middle-level managers, and Schilit's (1987) study was one of the first to examine middle managers' strategic influence in a large sample. Schilit's (1987) results were encouraging. Overall, he found that attempts by middle management to influence strategy were often successful.

Starting with another rich data set, Burgelman (1983a) developed an evolutionary model of strategy making, and in so doing, provided a theoretical basis for a new division of work between middle and top management in strategy making. In this model, internal selection mechanisms (i.e., resource allocation processes) are seen to govern the development of strategy, and the substance of strategic change evolves on the basis of variation in the form of autonomous strategic initiatives. The impetus for autonomous initiatives stems not from top managers but from idea generation at lower levels coupled with middle managers who recognize and champion these ideas as new strategic initiatives and/or corporate new ventures. In this context, rather than formulating changes in strategy, the role of top managers is to consider and ratify middle management initiatives and to create the necessary process architecture for an adaptive strategy process (Burgelman, 1983a).

This early work set the stage for a number of studies in the 1990s and beyond that support a broader view of the relationship between middle management activity and strategy. Wooldridge and Floyd (1990), for example, hypothesized that middle management could influence strategy either by improving the quality of decisions or by increasing the efficiency of implementation. Overall, their findings showed effects on the quality of decisions to be more important than those flowing from improved implementation. Consistent with a more pervasive influence by middle-level actors, Hart (1992) incorporated the involvement of organization members as one of three dimensions that characterize archetypes of strategy making (Hart, 1992). As a result of his theorizing, Hart (1992) explicitly called for research that assessed not only top but also middle- and operating-level managers' perceptions of strategy (p. 346). Bartlett and Ghoshal's (1993) later depiction of management responsibilities in Asea Brown Boveri (ABB) is consistent with Hart's theory. In this study, frontline managers who were once simply implementers at ABB became identified as the primary source of entrepreneurial initiatives.

Along with previous studies, Bartlett and Ghoshal's (1993) research set the stage for a redefinition and realignment of the strategic roles performed at various levels of management. Middle managers, once viewed as narrowly focused on control, came to be recognized as a resource for frontline managers, coaching and supporting their entrepreneurial activities. Top managers, having delegated both operational decision making and strategic initiative, were now seen as focused more on managing the entrepreneurial process, for example, developing broad objectives and setting performance standards. Andersen's (2004) later study of 185 organizations provides additional confirmation of this "radically decentralized" organizing principle in the broader population of organizations. In particular, he found that for large

organizations in dynamic environments, a wider distribution of strategic decision-making authority is associated positively with organizational performance.

A more substantive position for middle managers in strategy process thus emerged in conjunction with a new model of organization; one that is flatter and more entrepreneurial than classical forms and that competes in knowledge-intensive environments. Work such as Burgelman's (1994) study tracing the evolution of Intel's exit from the memory business shows the importance of middle management as vertical mediators between top and operating levels in the development of core competence. Complementing this, Bartlett and Ghoshal (1993) identified middle managers not as vertical links but as horizontal integrators, helping to ensure the distribution of knowledge-based resources throughout the organization.

Nonaka's (1994) influential paper on knowledge creation may be seen as a synthesis of the vertical and horizontal influences of middle management. Nonaka argues forcefully that middle managers influence the strategy process by mediating vertically between the conceptual knowledge at the top and knowledge of operations at the bottom of the organization. In addition, however, his theory describes a spiral where middle managers interact in both horizontal and vertical directions to combine and recombine tacit and explicit forms of knowledge. Indeed, for Nonaka (1991, 1994), the vertical and horizontal interactions of middle managers are the primary impetus of organizational knowledge creation, and hence, strategic change.

In sum, the view of middle managers' place in strategy development has developed historically from one where they essentially take direction from, and provide input to, top management to one where they are at the center of the two processes that have become the basis of strategy formation—knowledge creation and the development of core competence. The social learning perspective provided both motivation and theoretical grounding for this shift and continues to be the basis for much contemporary work on middle-level strategic management.

Review of the Literature

Studies from the middle management perspective spring from concerns about a number of different phenomena, and research has accumulated around three broad topics: strategic roles and their antecedents, middle managers' involvement in strategy and organizational cognition, and the relationship between middle management strategic behavior and organizational outcomes. Our review proceeds by summarizing work within each of these streams. Several studies make contributions across these categories and are therefore discussed in more than one section. Table 2 summarizes prior research in chronological order and indicates each study's focus in terms of one or more of these three categories. As the table suggests, studies have investigated a wide range of constructs and adopted a variety of methodological approaches.

Middle Managers' Strategic Roles and Their Antecedents

Synthesizing insights from earlier literature (especially Burgelman, 1983a, 1983b; Mintzberg, 1978; Mintzberg & Waters, 1985), Floyd and Wooldridge (1992, 1996) articulated four strategic roles of middle managers. Each role is distinguished by a unique combination of cognitive and behavioral components. The traditional role, implementation, for example,

f Strate	Strate	Table 7	itegy Research From a Middle Management Perspective
	cal Summary		f Strate

Studies/Year	Research Focus	Theoretical Lens	Method	Core Findings
Guth & MacMillan (1986)	Middle management outcomes	Expectancy theory; micro politics	Correlation analysis; 90 middle managers' interventions into interdepartmental decisions	The article explains interventions of middle management against top-level decisions as driven by perceived conflicts of interest. The sources of middle management counter effort as well as remedial top management tactics are identified.
Wooldridge & Floyd (1989)	Middle management cognition and involvement Middle management outcomes	Strategic decision making; strategic consensus	Conceptual	The relationship between strategic consensus and firm performance is elaborated by analyzing strategy processes. Consensus among middle managers is seen to be more important in incremental than synoptic contexts.
Wooldridge & Floyd (1990)	Middle management cognition and involvement Middle management outcomes	Strategic decision making; strategic consensus	Correlation analysis; 20 banking and manufacturing firms	Although the study did not find links between middle management consensus and performance, middle managers' involvement in strategic planning was associated with higher levels of consensus and financial performance.
Westley (1990)	Middle management cognition and involvement	Conversation theory; interaction rituals; emotion work	Conceptual; 3 illustrative cases in one large, manufacturing firm	The article examines how middle managers' exclusion from strategy conversations in a bureaucratic organization leads to demotivation, alienation, and conflict. Conditions that may increase and sustain feelings of inclusion and motivation are discussed.
Beatty & Lee (1992)	Strategic roles of middle management	Leadership styles	Case study; implementation of computer-aided systems in 3 U.K. and Canadian firms	The study indicates transformational leadership by middle management to be more effective in overcoming barriers to organizational change than transactional leadership.

Table 2 (continued)

Studies/Year	Research Focus	Theoretical Lens	Method	Core Findings
Floyd & Wooldridge (1992)	Strategic roles of middle management	Strategy process; role theory	Factor and correlation analysis; 259 middle managers in 25 organizations	The study builds a typology of four middle management roles in strategy (championing, synthesizing, facilitating, implementing) and links these to organizational strategy. Level and type of middle management strategic involvement are found to vary with type of strategy.
Dutton & Ashford (1993)	Strategic roles of middle management	Upward influence; social problem theory; impression	Conceptual	The article examines how characteristics of top and middle-level managers, timing, and the process used affect the success of middle managers' issue-selling efforts.
Burgelman (1994)	Middle management outcomes (strategic roles of middle management)	Resource allocation; organization ecology	Longitudinal case study of one major high-technology firm	A firm's effective exit from its core business was found to result from emergent strategy. Middle managers' technology choices laid the foundation for the redefinition of cornorale strategy and core competencies.
Mangaliso (1995)	Middle management cognition and involvement	Information theory; contingency theory	Regression analysis; 69 middle managers in one subsidiary of a large, diversified	Decentralization associated with increased strategic usefulness of information (in terms of aggregation) as perceived by middle managers in highly uncertain settings
Dutton, Ashford, O'Neill, Hayes, & Wierba (1997)	Strategic roles of middle management	Upward Influence; impression management	Inductive qualitative study and factor analysis; one large telecommunication firm	The article shows how managers' interpretation of the overall supportiveness of the organizational context influences their decisions to sell issues. Managers are not fully autonomous agents but rather conscious of aligning themselves with the
Floyd & Wooldridge (1997)	Middle management outcomes	Role theory; organization ecology; boundary spanning	Regression analysis; 259 middle managers from 25 organizations	Middle managers in boundary-spanning positions reported higher levels of strategic influence activity. Firm performance was associated with more uniform levels of shift

Table 2 (continued)

Studies/Year	Research Focus	Theoretical Lens	Method	Core Findings
				downward strategic influence on the part of middle management, and more varied levels of upward influence.
Floyd & Wooldridge (1999)	Strategic roles of middle management	Evolutionary theory; knowledge theory; social networks	Conceptual	Corporate entrepreneurship is conceptualized as a multilayered process with middle managers as key actors who build and integrate knowledge domains, social networks, and resources.
Floyd & Lane (2000)	Strategic roles of middle management	Evolutionary change; role theory; organizational learning	Conceptual	Middle managers are theorized to more likely experience conflict between strategic roles than other managerial levels. Role conflict is inevitable in complex settings but can be reduced through control mechanisms appropriate to the environment.
Dutton, Ashford, O'Neil, & Lawrence (2001)	Strategic roles of middle management	Upward influence; impression management	Inductive qualitative study; 82 issue-selling episodes of 42 middle managers in one, large, not-for-profit hospital	The article refines issue-selling theory: The selling process was found to be more political and contextually embedded. Linking the initiative to organizational legitimacy, value, and relevance increased selling success. Packaging was more complex, but sellers did not use emotional appeals, and impression management concerns seemed less relevant.
King & Zeithaml (2001)	Middle management cognition and involvement	Resource-based view	Correlation analysis and CEO interviews; 224 executives in 17 textile manufacturing firms and hospitals	The study examines managerial perceptions of causally ambiguous firm competencies: Top managers in high-performing firms were more likely to believe that competencies were causally ambiguous. Middle managers demonstrated a high degree of consensus regarding linkages between competencies

Table 2 (continued)

Studies/Year	Research Focus	Theoretical Lens	Method	Core Findings
Hornsby, Kuratko, & Zahra (2002)	Strategic roles of middle management	Corporate entrepreneurship	Factor analysis; 761 middle managers in 17 organizations	and performance, indicating their important role in intrafirm factor mobility. The article identifies five organizational factors that support midlevel corporate entrepreneurship: top management support, work discretion/autonomy, rewards/reinforcement, time availability,
Huy (2002)	Strategic roles of middle management	Emotion management	Longitudinal case study on radical change in one, large information technology (IT) service firm	Organizational Dountaires. Middle managers are shown to "balance" emotions during radical change, helping groups to adapt by committing passionately to individual change projects and, simultaneously, attending to change recipients, needs for continuity.
Marginson (2002)	Strategic roles of middle management	Managerial control systems; emergent strategy	Longitudinal case study of strategic change in a U.K. telecommunications firm	The article details effects of managerial control systems on midlevel strategic initiative: Belief systems created a general climate for corporate entrepreneurship rather than instigating specific ideas. Administrative systems led to separation of entrepreneurial and support roles. Tensions resulting from multiple key performance indicators were resolved by prioritizing single measures.
Balogun & Johnson (2004)	Middle management cognition and involvement	Sensemaking; schema change	Longitudinal case study in large, privatized utility firm; managerial diaries	The article traces the development of middle managers' mental models during an imposed shift from hierarchical to decentralized organization. Findings indicate a contingency logic between change type and schema development. Middle mangers were found to rely on informal negotiations with

	_	
-	ζ	3
	q	ڊ
	Ξ	3
	Ξ	3
•	Ę	3
	۶	3
	ç	3
`	_	_
•		1
•	_	1
` ·		100
	_	100

		lanie	lable 2 (continued)	
Studies/Year	Research Focus	Theoretical Lens	Method	Core Findings
Boyett & Currie (2004)	Middle management outcomes	International organization; emergent strategy	Longitudinal case study of one international corporate venture	peers to interpret and implement change because of distant top managers. In an international venture, midlevel collaboration between parent firm and new venture was found to be critical to reconcile strategic intent and local context.
Carney (2004)	Strategic roles of middle management	Strategic consensus	Case study; 25 semistructured interviews.	Organizational structure, hierarchy, and locus of control were found to affect how middle managers perceive their role in the strategy process.
Ketokivi & Castañer (2004)	Middle management cognition and involvement	Strategic planning; behavioral theory	Factor analysis; 164 manufacturing plants	The study provides large-scale evidence on how participation and communication in strategic planning complemented each other in achieving goal congruence among middle managers.
Kuratko & Goldsby (2004)	Middle management outcomes	Corporate entrepreneurship; ethics	Conceptual	To impede unethical behavior by middle managers in corporate entrepreneurship, a framework is developed that identifies barriers to corporate entrepreneurship, resultant ethical dilemmas, and remedial HR practices.
Currie & Procter (2005)	Strategic roles of middle management	Role orientation, role ambiguity, role conflict	Interpretative case study; three U.K. hospitals	Expectations of key stakeholders are identified as primary antecedents to middle management's strategic contributions. Inconsistent cues from stakeholders caused managers to be reluctant to perform needed role (role ambiguity) and created role conflict
Kodama (2005)	Strategic roles of middle management	Knowledge creation; leadership	Case study; new product development in 5 IT and multimedia firms	This study describes middle management's role in building and leading informal strategic networks in and across firms for open innovation.

Table 2 (continued)

			_ (
Studies/Year	Research Focus	Theoretical Lens	Method	Core Findings
Kuratko, Ireland, Covin, & Hornsby (2005)	Strategic roles of middle management	Corporate entrepreneurship; motivation	Conceptual	The article conceives a model of middle management's role in corporate entrepreneurship, depicting organizational antecedents, entrepreneurial actions, and (individual & organizational) outcomes.
Lines (2005)	Middle management cognition and involvement	Organizational Icarning	Regression analysis; 189 middle managers	Social accounting and participative strategic planning were found to increase organizational learning at middle levels during strategic change.
Ling, Floyd, & Baldridge (2005)	Strategic roles of middle management	International management; cultural syndroms	Conceptual	The article develops an acculturated view of issue selling. Managers socialized in different cultures will vary in their perception of the context and how they choose to sell issues.
Mair (2005)	Middle management outcomes	Contingency theory	Structural equation model; data on 118 managers and units of one large European financial service firm	The study reports business unit performance effects of middle managers' strategic activity, their demographic characteristics, and their immediate competitive environment.
Mantere (2005)	Strategic roles of middle management	Strategy as practice	Interviews of 158 champions in 12 organizations	The study identifies a tension between recursive and adaptive practices that enable and disable strategic champions.
Rouleau (2005)	Strategic roles of middle management	Role theory; micro practice	Interpretative case study of strategic change in one Canadian clothing company	The study identified four micro practices managers use to interpret and sell strategic change: translating the orientation, overcoding the strategy, disciplining the client, instifying the change.
Meyer (2006)	Middle management outcomes	Change dynamics	Longitudinal case study of one merger between four European financial service firms	The article shows that merger implementation may result less from conflicts between merger partners than from intrafirm tensions between middle management groups and top managers' inability to mediate them.

Table 2 (continued)

Studies/Year	Research Focus	Theoretical Lens	Method	Core Findings
Laine & Vaara (2006)	Middle management cognition and involvement	Strategic discourse; micro polítics	Interpretative case study of one European engineering and consulting company	In a broader analysis of competing intraorganizational discourses in strategy development, middle management was found to resist corporate-level attempts to control strategy by initiating a separate strategy discourse to increase midlevel influence and autonomy.
Pappas & Wooldridge (2007)	Strategic roles of middle management	Social network theory	Social network analysis; 89 middle managers in U.Sbased urban hospital	The article suggests specific relationships between alternative forms of network centrality and particular elements of the strategic renewal process.
Sillince & Mueller (2007)	Middle management outcomes	Cognitive framing; linguistics	Inductive: Longitudinal case study of a middle management team	A middle management team implementing a strategic initiative was found to reframe responsibilities and expectations based on the team's changing goals. Unclear top management intent favored midlevel comportunism.
Mantere (2008)	Strategic roles of middle management	Role expectations, conflict, managerial agency	Inductive analysis of 262 middle management interviews from 12 European organizations	The article shows how role expectations can both enable and constrain middle management strategic behavior, suggesting a reciprocal role theory. It identifies eight enabling top management actions: narration, contextualization, resource allocation, respect, trust reconvivances inclusion respect,
Vilà & Canales (2008)	Middle management cognition and involvement	Strategic planning	Longitudinal case study; strategic planning process at regional automobile club	Middle managers' active participation in strategic planning was found to increase their appreciation of priorities and goals and coordination during implementation.

springs from thinking that is consistent with existing strategy and from attempts to integrate subordinates' activities around this strategy. As synthesizers, middle managers interpret information and channel it upward to top management. Championing also involves upward influence, but in this role, middle management's divergent thinking has the potential to reshape upper management's concept of strategy. Finally, as facilitators, middle managers encourage organizational actors below and around them to engage in idea generation and other experimental efforts.

Consistent with this framework, and especially the championing and synthesizing roles, a substantial amount of work has been done elaborating and examining middle managers' *issue-selling* role (Dutton & Ashford, 1993; Dutton, Ashford, O'Neil, Hayes, & Wierba, 1997; Dutton, Asford, O'Neil, & Lawrence, 2001; Ling, Floyd, & Baldridge, 2005). Through issue selling, middle managers help shape the strategic agenda by influencing which issues come to the attention of top management. In a series of studies, Dutton and her colleagues explore how managers assess the organizational context for issue selling and the "moves" associated with both successful and unsuccessful issue-selling attempts. Overall, this research shows that how issues are packaged or framed, who is involved in the selling effort, the process used, and the timing of a selling effort all have a significant impact on the effectiveness of issue selling. Building on this work Ling et al. (2005) developed a model of middle manager issue selling in the context of a geographically dispersed multinational corporation. Their theory suggests that the intention to engage in issue selling and the packaging strategies used are subject to influence by national culture.

Whereas the literature on issue selling concerns the upward influence of middle managers, other work focuses on how middle managers promote strategic change downward. In Beatty and Lee (1992), middle managers using a transformational leadership approach were more effective in introducing technological change than transactional leaders who focused on technical problems to the neglect of people and organizational issues. Huy (2001, 2002) revealed middle managers' role in managing emotions during radical change. In what he called an "emotional balancing" process, Huy (2002) described middle managers who help people make sense of, and cope with, change. By attending to subordinates' negative emotions regarding downsizing, for example, middle managers cause a shift in subordinates' emotional responses, preventing potentially incendiary reactions, and facilitating smoother implementation of an otherwise distasteful strategy.

Recent studies also investigate how middle managers build and renew relationships across and beyond the organization. Building on Nonaka's (1994) knowledge creation theory, Kodama (2005) described middle managers' leadership role in building and integrating new product development teams in open innovation systems. Rouleau (2005) drew from theory on sensemaking and sensegiving (Gioia & Chittipeddi, 1991) to examine how managers in a Canadian clothing company interpret and sell strategic change to key stakeholders, especially the firm's clients. In a qualitative case study, Rouleau (2005) identified four middle manager micro-practices that sell strategic change: translating the orientation, overcoding the strategy, disciplining the client, and justifying the change. Rouleau's examination of these everyday practices provides finer-grained insight into the tactics middle managers use in their roles as interpreters and sellers of change and illustrates the potential of a micro-process approach in middle management research.

Floyd and Lane (2000) broadened consideration of managerial strategic roles by identifying and distinguishing roles for top, middle, and operating managers. Considering how these roles are enacted in response to varying interpretations of environmental cues, these authors highlight the potential for role conflict across levels of management. Suggesting that some role conflict is inevitable during periods of strategic change, they develop a theory to show how such conflict can be minimized through control mechanisms appropriate to the environmental conditions faced by the firm. They conclude that effective strategic renewal is associated with an organization's abilities to adapt control systems to environmental conditions.

Consistent with this theme, in a longitudinal case study, Marginson (2002) showed how management control systems shape middle managers' perceptions of their strategic roles. In particular, Marginson observed that how top management frames the strategic context (the belief system) influences the extent to which managers are likely to initiate and develop new strategic ideas. He also showed how administrative controls influence the location of new initiatives and the roles managers perform, arguing that the number and types of performance measures influence the ongoing development of strategic initiatives. Similarly, in a study of middle manager roles in 25 not-for-profit organizations, Carney (2004) found that organizational structure, specifically the number of hierarchical layers of management, influences managers' perceptions of their strategic roles. Not surprisingly, flat organizational structures are perceived by managers as enhancing communication flow and enabling involvement in strategy development.

Building on this work, Currie and Procter (2005) examined middle manager role conflict and ambiguity in three U.K. hospitals. Overall, they concluded that inconsistent expectations and cues from key stakeholders, including top managers, create role conflict and ambiguity among middle managers, making them reluctant to enact appropriate roles. In a similar vein, using a more micro-process approach, Mantere (2005, 2008) observed how role expectations can both enable and constrain middle management behavior and identified eight top management micro-practices that clarify expectations and enable middle managers to perform various strategic roles. Each practice is built on two-way managerial interactions. The major conclusion from this study is that consistent, reciprocal expectations between top and middle level managers are needed to avoid role conflict and enable middle managers' strategic behaviors. These insights are consistent with findings of Canales (2004), who showed how vertical and lateral managerial interactions combine to legitimize both new organizational strategies and the contributions of individual actors.

Middle managers' strategic roles have also been described as a part of the process of corporate entrepreneurship (for an earlier review of research on mid-level corporate entrepreneurship, see Fulop, 1991). Floyd and Wooldridge (1999), for example, described three roles managers perform to create and integrate knowledge in the corporate entrepreneurship process: identifying opportunities, developing initiatives, and renewing organizational capabilities. Paralleling the literature on role conflict discussed above, Hornsby, Kuratko, and Zahra (2002) developed a research instrument that assesses how middle managers perceive the potential of an organization's internal environment for supporting middle manager corporate entrepreneurship. Specifically, they suggested appropriate rewards, top management support, available resources, a supportive administrative structure, and a tolerance for risk taking as factors combining to determine the extent to which middle managers feel

enabled to take on corporate entrepreneurship roles. Kuratko, Ireland, Covin, and Hornsby (2005) integrated this research with corporate entrepreneurship and motivation theory to produce a conceptual model that links organizational antecedents to middle managers' entrepreneurial behavior and individual and organizational outcomes.

In addition to organizational and leadership issues surrounding how middle managers perceive their strategic role, other research has examined the relationship between social network position and the strategic roles enacted by middle managers. Floyd and Wooldridge (1997), for example, found that managers in "boundary spanning" positions are more likely to engage in strategic influence activity than others in more insulated positions. They theorized that boundary-spanning managers mediate between the organization's external environment and internal constituencies and as a result have more power to exert strategic influence. Building on this finding, Pappas and Wooldridge (2007) presented results from a study of 89 middle managers that suggest specific relationships between alternative forms of internal network centrality and the roles managers perform in the strategic renewal process. Together, these studies demonstrate that managers' network position both within and outside the organization influences role enactment and participation in the strategy process.

In sum, the literature on middle managers' strategic roles has identified a variety of related ways in which middle managers contribute to strategy formation. Work in this area has focused on identifying specific techniques managers use to influence strategy and how organizational context affects managers' enactment of specific roles. Role conflict, caused by different interpretations of environmental cues and inconsistent expectations among managers at different hierarchical levels, has been identified as an overarching factor accounting for differences in the strategic roles middle managers perform. In addition, managers' network relationships, both within and outside the organization, have been shown to be related to how middle managers contribute to strategy making.

Organizational Cognition and Middle Management Involvement in Strategy

The research on middle management strategic roles evolved out of a need to demonstrate their substantive involvement in the strategy process. Coincident with this work, another stream of research investigates relationships between such involvement and organizational cognition. This body of work proceeds from the recognition that middle managers come with a functional and/or subunit orientation that may influence their perceptions and turn their behavior toward pursuit of goals that are suboptimal from the perspective of the organization's overall strategy (Kiesler & Sproull, 1982; Markoczy, 2001; Walsh, 1988). In the presence of shared understandings about goals and other strategic priorities, however, middle managers may be more likely to enact influence in ways that integrate with the efforts of top managers and others in the organization to develop strategy (Wooldridge & Floyd, 1989). Researchers in this stream have examined this proposition and sought to elaborate our understanding of how middle management cognition influences and is influenced by strategy processes. Whereas early literature focuses on the outcomes of shared cognitions in the form of strategic consensus, more recent research considers the development of shared strategic thinking as an outcome of the strategic process.

As already noted, the study of strategic consensus is motivated by the premise that shared strategic thinking by managers improves the coordination and integration of their collective efforts, leads to smoother implementation of strategy, and enhances organizational performance (Bourgeois, 1980). (For a review of the strategic consensus literature, see Kellermanns, Walter, Lechner, & Floyd, 2005.) Although much of this research focuses on consensus within TMTs, a limited number of studies examine the effects of consensus among a broader group of managers, including middle managers.

Wooldridge and Floyd (1989) argue that one reason research on TMT consensus has failed to demonstrate a consistent consensus–performance relationship is that consensus among middle managers and other organizational actors has not been taken into account. They maintain that unless middle-level actors understand and are committed to top management's strategic goals, they are unlikely to support strategy implementation, and no amount of top management agreement will lead to effective strategic change (Dess, 1987; Floyd & Wooldridge, 1992). They further assert that top management consensus is more relevant to performance in contexts characterized by a synoptic, comprehensive strategy process, whereas more incremental, emergent processes are likely to require broader shared understandings that include middle managers (Wooldridge & Floyd, 1989).

Building on these theoretical arguments, Wooldridge and Floyd (1990) studied the extent that middle managers' agreement with top management's strategic priorities was increased through involvement in the strategic planning process and the effect that this had on organizational performance. They measured consensus as the similarity between the priorities expressed by the chief executive and a cohort of middle managers in each organization. In contrast to expectations, the study did not find consensus among middle managers to be related to organizational performance. The study did, however, demonstrate the importance of middle management involvement as a basis for increasing such consensus. In particular, the study found that involvement in strategy explained variance in both consensus among managers and organizational performance. These findings are consistent with a contemporaneous study (Westley, 1990) that showed how middle managers' exclusion from strategyrelated conversations led to alienation, lack of motivation to implement strategies, and intraorganizational conflict. In contrast, two-way conversations between top and middle managers were shown to enhance organizational responsiveness and innovation in strategy (Westley, 1990). Laine and Vaara (2006) added a discursive perspective to research on shared understandings. In this study, middle managers mobilized a distinctive strategy discourse literally starting their own strategic conversation—and thereby resisted corporate-level attempts to define shared understandings and control the development of strategy.

Other research examining relationships between middle managers' strategic thinking and strategic outcomes draws from the resource-based view. King and Zeithaml (2001) assessed the degree to which top and middle-level managers share perceptions about the causally ambiguous nature of firm strategic competencies. Their study is motivated by a paradox. Causal ambiguity associated with strategic competencies enhances firm performance by reducing the threat of imitation but may also hurt performance by inhibiting the deployment and exchange of competencies within the firm. Interestingly, in this study, top managers in successful firms were more likely to believe that their organizations' core competencies were

causally ambiguous. Middle managers in these same firms, on the other hand, had a clearer view of what constituted an organization's competences and demonstrated a high degree of consensus on linkages between competencies and performance. From a resource-based perspective, these results suggest that middle managers are in a better position than top managers to form shared understandings about an organization's core capabilities. As a group, therefore, they are likely to serve as important catalysts for exploiting existing firm capabilities and for exploring the development of new ones.

Although existing research has not demonstrated a consistent relationship between shared understandings about strategy (strategic consensus) among middle managers and organizational performance, there is considerable evidence to suggest that managers' involvement in various facets of the strategy process enhances their knowledge, understanding, and support of strategy. Mangaliso (1995), for example, showed how decentralized, participative processes increase the strategic usefulness of information at middle management levels, particularly in high-uncertainty environments. More recently, Ketokivi and Castañer (2004) provided largescale evidence concerning the informational and motivational benefits of participation and communication in strategic planning. In their study, involving middle managers in the strategic planning process and communicating agreed-upon priorities led to more integrated strategic thinking throughout the organization and significantly decreased middle managers' pursuit of position-related subunit goals over organizational goals. Stated differently, participation in strategic planning and communication of strategic priorities functioned as complements to enhance goal convergence and coordination across managers. Vilà and Canales (2008) corroborated these findings by showing how middle managers' more active involvement in the strategic planning of a regional automobile club enhanced their appreciation of strategic priorities and coordination during implementation. Consistent with this, Lines (2005) reported that middle manager participation in the strategy process was positively associated with organizational learning during top-down change.

Research from a sensemaking perspective (Gioia & Chittipeddi, 1991) also shows how the strategy process affects middle managers' strategic cognitions. Balogun and Johnson (2004), in particular, show how structural change imposed by top management initially created tension and conflicting interpretations of change among groups of middle managers. In the face of these different clusters of sensemaking, broader shared understandings evolved from middle managers who emphasized a common purpose. Differing cluster schemas were eventually reconciled through lateral interactions wherein managers negotiated a new set of shared understandings. Because top management was largely absent from this process, lateral social interactions among mid-level peers are seen to be more important than top-down communication in shaping how the organization interprets and responds to change.

Overall, research on organizational cognition and middle management involvement in strategy emanates from the tension created by managers' tendency to view organizational issues from functional and subunit perspectives and the need to adopt a wider organizational perspective when contributing to strategy. Whereas early research in this area attempted to identify associations between managers' shared understandings of strategy and organizational outcomes, more recent research has examined how characteristics of the strategy process affect the development of shared organizational cognitions.

Middle Management Activity and Organizational Outcomes

Tethering theory to organizational performance is a hallmark of strategic management research (Rumelt, Schendel, & Teece, 1991), and consistent with this, strategy research from a middle management perspective has investigated relationships to organization-wide outcomes. Broadly, this work can be sorted into studies focusing on relationships between middle management activity and economic performance and between middle management activity and emergent and realized strategy.

Research that considers middle management's effects on an organization's economic or financial performance has based the relationship on relatively direct forms of involvement in the strategy process. Wooldridge and Floyd (1990), for example, studied relationships between middle management involvement in specific elements of strategic planning (e.g., goal formation, alternative consideration, etc.) and financial performance in 25 organizations. Their findings showed that middle managers' involvement, but not their agreement with the CEO's priorities, was associated with financial performance. In a subsequent study defining involvement as role enactment, Floyd and Wooldridge (1997) found that variation among middle managers in their performance of divergent strategic roles and consistency in integrative roles was associated with firm-level financial performance. In other words, organizational performance was enhanced in firms where some, but not all, middle managers performed divergent strategic roles but where all or most performed integrative roles.

More recently, Mair's (2005) study in a large financial services firm showed significant relationships between middle manager behavior and demographics, and unit-level profit growth. Specifically, the study showed that unit-level performance was improved when middle managers enacted behaviors consistent with top management strategy. In addition, higher unit performance was associated with particular middle manager demographics, including education, work experience, and gender.

Beyond its influence on economic performance, several studies investigate how middle management activity influences the emergence of realized strategy (Mintzberg, 1978). For example, noting an alignment between middle management strategic roles and strategy as defined by Miles and Snow (1978), Floyd and Wooldridge (1992) present findings linking middle management behavior to realized strategy. In particular, their findings suggest that a relatively high level of championing behavior is important to the prospector's ability to uncover new market segments and explore new business opportunities, whereas an emphasis on integrative roles such as synthesizing and implementation is needed to successfully pursue a defender strategy.

In addition to supporting strategies induced from the top, Robert Burgelman's work has been critical in its demonstration of how middle managers, at times, lead the process of strategic change. In a stark example, Burgelman (1994) examined the influence of Intel's middle managers on the company's emergent exit from memory markets. In the process of exiting, Intel redefined its competitive position emergently and evolved a redefinition of its core competencies. One of the lessons from this study is that middle management emergent behavior often diverges from, and eventually affects, the retrospective redefinition of official strategy by top managers. Consistent with this, Boyett and Currie (2004) showed how

middle managers in an Irish telecommunications firm, although failing to accomplish clearly set corporate-level goals, orchestrated an emergent strategy that became the basis for the corporation's new strategic vision.

Although these examples present the connection between middle management activity and realized strategy in a positive light, middle managers' contributions to strategy have also been conceptualized as a hindrance. Guth and MacMillan's (1986) seminal work, for example, stands in sharp contrast to the positive picture of middle management influence on realized strategy. Their study identified several specific ways in which middle management hindered strategy implementation, including foot-dragging and sabotage. Moreover, these authors argued that middle manager perceptions of the strategy process were colored by individual and unit self-interest. More recently, Meyer (2006) showed how middle managers' individual and group-level self-interests led to destructive interventions, resulting in the failed implementation of a top-management orchestrated merger. In Sillince and Mueller (2007), a middle management team in charge of implementing a top-down strategic initiative was found to reframe responsibility for the initiative in line with the team's goals, indicating middle management opportunism and linguistic influencing in the absence of a clear top management mandate. Finally, Kuratko and Goldsby (2004) provided anecdotal evidence that raises potential ethical concerns about the influence of middle managers on realized strategy.

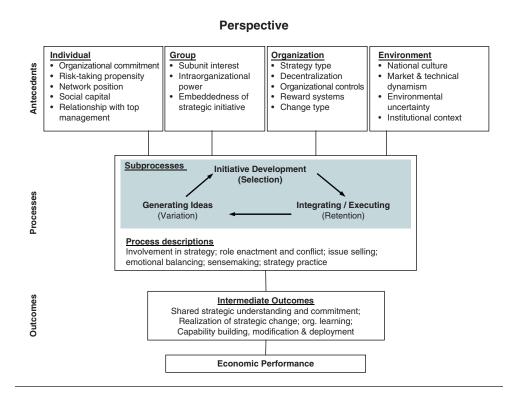
In sum, although there is some evidence for a positive association between middle management's involvement in strategy and organizational outcomes, on the whole, much more research in this area is warranted. In the aggregate, past research using cross-sectional designs has demonstrated a positive relationship to economic performance, but little or no research has taken a fine-grained approach to uncover important contingency relationships. Although the theoretical basis for expecting positive outcomes is the potential influence of middle management on how strategies form, for example, how realized strategies emerge, relatively little research has examined this emergent process empirically, and there is some evidence that middle management influence on strategy can, at times, be associated negatively with performance.

Synthesis, Critique, and Future Research From a Middle Management Perspective

Although each of the three research streams has contributed to a broadened understanding of strategy formation and change in complex organizational settings, taken as a whole, the cumulative impact of this literature has been limited by the variety of research issues addressed, a proliferation of research constructs, and multiple research methodologies. At the same time, an examination of the literature suggests an overarching framework that holds the potential to organize existing research into a more coherent middle management perspective and that may serve to motivate future research. Figure 1 presents the organizing framework that emerged from our review.

Figure 1 categorizes key constructs into antecedent conditions, processes, and outcomes. Directional arrows have been omitted to reflect the possibility of both processual and causal relationships and the potential for reciprocity between categories (Pettigrew, 1992). Not

Figure 1
Organizing Framework for Research from a Middle Management



intended as a comprehensive catalogue, Figure 1 reflects theoretical associations within and across categories that have been investigated or suggested in prior research and that could fruitfully be examined in future studies. Thus, it helps to facilitate a synthesis and critique of existing contributions and to identify high-priority areas for future research. For example, as Figure 1 shows, prior research has emphasized individual and organizational antecedents of middle management processes (e.g., individual risk taking and supportive organization culture as antecedents of issue selling). Antecedents at the group and environmental level have been largely neglected. Thus, we would argue that relationships like those between the social embeddedness of a strategic initiative group or a group's intraorganizational power and the initiative development process could be usefully examined. Similarly, Figure 1 lists the process descriptions prevalent in the literature to date (e.g., involvement in strategy making, role enactment, emotional balancing) and suggests new ways that future research might study the mid-level process (e.g., practices). The stages of the strategic renewal process appear in the center of process descriptions to illustrate potential intersections between renewal stages (e.g., initiative development) and middle management processes (e.g., role

enactment). Finally, as a holistic depiction, Figure 1 is intended to signal the need for work that embraces relationships across multiple categories (e.g., relationships between organizational controls, sensemaking, and strategic change).

In the following sections, we critique and develop suggestions for future research in accord with each of the three research streams identified in our review (middle management roles, involvement, and outcomes). At the same time, we aim to encourage cumulative future research by suggesting shared theoretical foundations and connections across research streams. Consequently, we end with a call for multilevel research and a discussion of resulting methodological and theoretical challenges.

High-Priority Research Issues

The need for holistic investigation of strategic roles. The literature on middle management's strategic roles has elaborated various ways middle managers become involved in strategy, and this has done much to advance the field's understanding of potential middle manager contributions. As exemplars of this literature, we point to the articles by Dutton and colleagues on issue selling (e.g., Dutton & Ashford, 1993). In combination, these studies represent the kind of programmatic research that leads to a cumulative knowledge base. The authors begin by carefully developing theory on an interesting aspect of how middle managers contribute to strategy making. Then, they draw from established theories to articulate a range of propositions. In subsequent articles (Dutton et al., 1997; Dutton et al., 2001), they explore these relationships empirically, using a combination of exploratory qualitative and quantitative methods.

Regrettably, the coherence reflected in this work is not apparent in most of the literature on middle management's strategic roles. Authors develop, describe, and label roles differently, thereby reducing the transparency of linkages across studies. Issue selling, for example, appears closely related to Floyd and Wooldridge's (1992, 1996) synthesizing role but may also include elements of championing. Similarly, Rouleau's (2005) interpreting and selling change has clear overlaps with both synthesizing and implementing. All of the authors acknowledge the potential, even likelihood, that roles will overlap, but the lack of consistency in describing the roles has frustrated the development of cumulative research into the origins and consequences of middle manager strategic behavior.

Compounding this issue, existing typologies have drawn from top management and deliberate strategy as key reference points, and most existing research relies on empirical observation and classification to identify behavior. Although this has been a useful way to broaden our understanding of how middle managers contribute to strategy, it has the disadvantage of proliferating an ever-broader descriptive base. What is needed at this point is a theory-based synthesis that results in a logically consistent and parsimonious set of middle management strategic roles.

Future research should therefore work toward developing a more holistic typology of middle management's strategic roles. Toward this end, future research would benefit from incorporating constructs that are more closely tied to theories of the strategy process itself, such as the intraorganizational evolutionary theory of strategic renewal (Barnett & Burgelman,

1996; Burgelman, 1991; Huff, Huff, & Thomas, 1992; Nelson & Winter, 1982). Such regrounding would serve to embed strategic roles in a more all-embracing theory of the context and thus be more likely to capture the breadth of middle managers' strategic activity and also its antecedents and consequences. For example, as outlined in Figure 1, research might begin by conceptualizing roles in the context of stages of the strategic renewal process and link those to the variation-selection-retention framework of intraorganizational ecology theory (Burgelman, 1991), that is, idea generation (variation), initiative development (selection), and integration/execution of newly developed routines (retention).

This more holistic process perspective reveals that extant research, despite the interest in middle managers' role in innovation and corporate entrepreneurship, has primarily investigated how middle managers disseminate and communicate existing knowledge, leaving the creation of new ideas underexplored. For instance, although the synthesizing role describes middle managers categorizing and selling issues, we still lack a theory of how and when middle managers contribute to the identification or generation of new ideas, how they fit these ideas into the broader strategic context, and the overall effect of these behaviors on the firm's innovative capacity.

Future research should also broaden the investigation of the psychological foundations of middle management behavior. In particular, future studies could build on Huy's (2001, 2002) research and further elaborate links between middle management emotion and strategy process. Positive and negative feelings are likely to be tied to particular behaviors, in the form of strategic roles (e.g., expressing empathy in the implementation role) or more broadly as "commitment" to the organization's strategy (Dess, 1987). At an even more general level, researchers have argued that negative affect distorts perceptions about conditions in both the external environment and internal organization (Daniels, 1998, 2003). This distortion turns up in how people think about threats, negative outcomes, and even worst-case scenarios. The fears associated with such thinking are likely to lead to low trust in the organization, poor information sharing, and ultimately, low quality decision making (Amason, 1996). Thus, developing and maintaining positive feeling in the face of the negativity and fear associated with some strategic change appears to be a central contribution of middle management to strategy formation and requires further investigation.

A more theoretically grounded investigation of middle management roles may also help us to understand how and why middle management strategic leaders emerge. Prior research (Floyd & Wooldridge, 1997) indicates that, in high-performing firms, different managers influence strategy in different ways at different points in time. Future research may therefore undertake longitudinal studies that illuminate key patterns in the evolution of middle-level influence over time.

On a related note, taking a middle management perspective raises underexplored questions about managerial agency and the legitimacy of hierarchical structures. Middle managers often gain strategic influence without or even against formal authority (e.g., Burgelman, 1994). Future research therefore needs to explore questions about the agency problems that arise in such circumstances (e.g., Stroh, Brett, Baumann, & Reilly, 1996). For example: How do firms manage the personal and organizational risks of behavior that diverges from official strategy (e.g., Dutton & Ashford, 1993), including unethical behavior (Kuratko & Goldsby, 2004)?

Although existing research identifies middle managers as important mediators across organizational boundaries (e.g., Bartlett & Ghoshal, 1993; Balogun & Johnson, 2004), there are still too few studies (e.g., Rouleau, 2005) that investigate how middle managers actually realize and renew intraorganizational and external relationships. Thus, inquiries into middle managers' horizontal linking activities have the potential to inform the literature on such issues as how firms actually realize cross-business synergies or how they disentangle assets in corporate divestitures (Johnson, Melin, & Whittington, 2003).

Finally, it is important for individual managerial roles to be examined within the context of group and organizational-level activity. Existing research examining middle management roles has tended to isolate managerial activity and overemphasize individuals at the expense of groups, and multiactor processes. This focus has obfuscated links between individual middle management activity and broader strategic processes (e.g., project teams pursuing initiatives in the strategic renewal process) and underemphasized the social interactions that are known to be important in social learning (Crossan, Lane, & White, 1999). Future research, therefore, would be well served to examine how individual managerial behaviors are connected to group-level activities and, in turn, affect organizational outcomes. Along these lines, and consistent with earlier studies (e.g., Rouleau, 2005; Westley, 1990), future research might explore middle managers' strategic influence in terms of underlying practical skills and link these microprocesses to group-level phenomena such as the use of language, strategic planning, and face-to-face meetings (Jarzabkowski, 2005; Johnson, Langley, Melin, & Whittington, 2007). Research should also examine how microprocesses connect to macro institutional settings, such as the strategic discourse (Vaara, Kleymann, & Seristo, 2004) or industry recipes (Spender, 1989).

The need to connect thought and action. Although the middle management perspective was launched in opposition to the separation of thinking and acting in strategy, overtones of this distinction are replicated in the research. In fact, the original motivation for studying shared strategic understandings among middle managers was to examine direct links with organizational performance (Wooldridge & Floyd, 1990). This approach followed the logic of contemporaneous research focused on top managers but ignored the rather obvious mediating effects of action on the thinking–performance relationship. Hints of this gap are reflected in the literature. Dess (1987), for example, was early to recognize that shared understanding of a strategy did not necessarily mean acceptance, and that without the latter, strategic consensus among middle managers was unlikely to lead to realization of intended strategy. As a result, Dess and others (Wooldridge & Floyd, 1989) called for studies incorporating shared commitment to strategy as a second dimension of strategic consensus. Although this avoids a false separation between thought and emotion, it still falls short of incorporating behavior into the consensus–performance relationship.

In our view, therefore, future research will profit from creating bridges between cognitive and behavioral approaches in explicating a middle management perspective of strategy formation. Some of these links are rather obvious, such as the need to explain the enactment of strategic roles in cognitive terms. Strategic behavior is largely voluntary and not formally coordinated within organizations (Floyd & Lane, 2000). If lack of formal coordination is

taken to mean no coordination at all, however, it seems likely that role conflict will arise in the absence of a shared mental model. On the basis of interactions with customers, for example, a middle manager might perceive the need for a change in product strategy. At the same time, on the basis of interactions with representatives of the capital markets, top managers may share a different mind-set, one more closely associated with the status quo (Hambrick, Geletkanycz, & Fredrickson, 1993). In the face of such differences in perception, managers are likely to feel strategic role conflict; that is, uncertainty and tension about which role to enact.

Research on teams suggests that strategic role conflict can be at least partly avoided if middle and top-level managers share a mental model of the strategic situation (e.g., strength, weaknesses, etc.) and the organization's strategic posture (e.g., goals, competitive strategy, etc.) (Cannon-Bowers, Salas, & Converse, 1993; Klimosky & Mohammed, 1994). When managers share similar mental models of task processes and outcomes, they are more likely to understand one another's perspectives, to communicate more easily, to coordinate more effectively, and to improve overall team performance (Salas & Cannon-Bowers, 2001). As strategy making involves a high degree of complexity where conventional coordination mechanisms are unlikely to be adequate, the benefits of mental model similarity may be even more pronounced in this context than in less uncertain operating environments. Future research, therefore, should establish links between shared understanding or mental model similarity and the strategic behavior of middle managers, both in teams and as cohorts of individuals. For example, it would be interesting to confirm that the championing and facilitating activities of middle managers actually emanate from a divergent mind-set (Floyd & Wooldridge, 1992) and whether these activities are positively and monotonically related to divergence, that is, more disagreement or questioning of official strategy results in more championing behavior. More interesting would be research highlighting varieties of mental models at different levels and in different divisions within large, complex organizations. King and Zeithaml's (2001) work shows that managers' perspective matters when it comes to understanding organizational capabilities and unraveling causal ambiguities. It is useful to know that middle managers may have a better perspective on capability development, and future research should build on this idea. To confirm the efficacy of shared understandings in strategic contexts, for example, researchers could observe mental model similarity within teams associated with strategic initiatives. How, for example, does mental model similarity within a team and similarities or differences between the team and other units (e.g., top management) influence enactment of roles and subsequent success or failure of an initiative?

More broadly, high-performing organizations in dynamic environments need a combination of high levels of differentiation and sophisticated integration devices (Lawrence & Lorsch, 1967). How organizations achieve this balance of integration and differentiation in terms of strategic thinking and behaviors across and within groups and how they create and maintain shared understandings of strategy without eliminating divergent thinking and emergent activities are important research questions. Future research, therefore, must advance understanding of contexts that require shared thinking at middle levels, how these shared mental models are maintained over time, and how middle management thinking complements and/or conflicts with managerial perceptions and cognitions at other levels.

The need for links between antecedents, processes, and outcomes. As important as the need to link thought and action is the development of theory that incorporates both the conditions leading to and outcomes flowing from the enactment of strategic roles. Although researchers have identified a large number of antecedents of middle management strategic behavior, as with the case of the roles themselves, the list seems to grow with each study. One way to work toward a synthesis could be by beginning to sort existing antecedents into those that emanate from the individual (e.g., position in the social network), group (e.g., relationships with top management), and organizational (e.g., decentralized decision making) levels of analysis (see Figure 1). Such a classification of antecedents would recognize the potential for interactions and multilevel influences—for example, decentralized decision making leads to increases in the number of middle managers in boundary-spanning roles. In addition, it would be consistent with the need for different theories to explain circumstances favoring middle management activity. For instance, organizational antecedents of middle management behavior have been the primary focus. Future studies thus may extend individual and group antecedents to include variables such as cohesiveness and network density to develop a more fine-grained understanding of the sources of strategic influence.

In addition, the development of a more normative understanding of middle management strategic activity requires research that includes both antecedents in the external environment and important outcomes like innovation or capability building. Existing theory asserts associations between middle manager roles and organizational strategy but fails to address the question of how such alignment develops and how it influences organizational performance. Granting that championing behavior is more prominent in Miles and Snow's (1978) prospector strategy, for example, what happens when changes in the external environment create the need for strategic change? There is evidence that middle managers' strategic behavior can be an important source of adaptation (Balogun & Johnson, 2004; Burgelman, 1994; Huy, 2002), and we have theory about how they effect such change. It is less clear, however, how external cues, either in isolation or in combination with internal conditions, influence their behavior in the first place. Moreover, middle manager perceptions of the external environment are likely to be influenced by intraorganizational antecedents at individual, group, and organizational levels of analysis. Boundary spanners in decentralized organizations, for example, may be more likely to perceive changes in the external environment. Thus, assuming middle managers attend to external conditions, we need to understand better how such conditions influence their behavior and what this means for organizational outcomes such as strategic change, adaptation, and organizational performance. This external focus should also include empirical studies that incorporate national cultural differences and their effects on middle management strategic influence (Ling et al., 2005).

Our review also shows that there are relatively few studies establishing links between specific activities and broader organizational outcomes. Although we know, for example, how middle managers can increase their chances of getting top management's attention through issue selling, there is less evidence concerning when and to what extent these efforts actually succeed in influencing top management's perceptions, much less whether such efforts serve organizational purposes. Although the majority of existing research assumes positive associations between middle manager strategic activity and organizational performance, there is a strong likelihood that their behavior influences outcomes in both positive and negative ways. Complicating this issue, the pursuit of self- (and subunit) interests may not

always be incompatible with support for organizational goals and strategies. Actors' motivations are difficult to discern. What seems like middle management resistance, for example, may actually represent middle managers' honest appraisals of what is feasible or in the best interest of the organization (Ford, Ford, & D'Amelio, 2008; Guth & MacMillan, 1986). Future research would do well, therefore, to examine these dynamics and to extend the work of Ketokivi and Castañer (2004) in describing conditions that help to align individual and subunit interests with those of the larger organization.

As shown in Figure 1, middle management research has profited from examinations of intermediate outcome variables, which correspond more closely than organization-wide outcomes to middle managers' scope of formal authority. This research also helps to build a more complete explanation of the relationship between middle management and organizational performance. The search for more proximate outcomes should be guided, however, by developments in theory. For instance, research on strategic renewal has investigated such outcomes as innovativeness (Rodan & Galunic, 2004), success of strategic initiatives (McGrath, 2001), and capability development (Burgelman, 1994). Overall, middle management research has potential to contribute to the micro-foundations of capability- and knowledge-based views. Whereas prior research on ambidexterity, the ability to balance long-term innovation with short-term efficiency, has primarily focused on the firm-level phenomena and senior management decision making (March, 1991), middle management research may illuminate the critical balancing acts underlying ambidexterity at the group or subunit levels (Leonard-Barton, 1992).

The need for multilevel theory. Perhaps most fundamentally, Figure 1 suggests the need for multilevel theory building and research (Tosi, 1992). Indeed, like most management research, many of the outlined future research topics investigate multilevel relationships and require careful consideration of level of analysis (e.g., the relationship between organizational antecedents and individual middle management behaviors) (Hitt, Beamish, Jackson, & Mathieu, 2007). Although multilevel research seems critical to a fuller understanding of linkages between managers' perceptions and behaviors, and organizational contexts and outcomes, it is practically challenging.

Such work would acknowledge *reciprocal* influences among environmental and organizational contexts, individual and group-level behaviors, and organizational outcomes. Although the constructs included in Figure 1 are neatly categorized as antecedents, processes, and outcomes, their true relationships to one another are likely to be more complex, recursive, and bidirectional rather than discrete and unidirectional. For example, although a firm's strategic type is likely to affect managerial involvement in strategy making, and such involvement may in turn influence organizational outcomes, over time, perceptions of success or failure may reinforce, or precipitate change, at organizational and managerial levels. Thus, future research must be sensitive to, and address, the challenges posed by possible simultaneous influences between antecedents and their effects and across levels of analysis.

A second major challenge resulting from multiple levels of inquiry are theoretical incommensurabilities. Micro and macro phenomena are typically not linked in a simple linear or causal fashion. Scholars therefore need to find ways that capture cross-level relationships beyond rough aggregations of lower levels. We have explicated differences between choice and social learning perspectives, in particular, to encourage future research to take these partly conflicting assumptions as a point of departure. A careful consideration of underlying

differences and commonalities may provide the basis for a more holistic, dynamic theory of strategy process. In addition, as proposed earlier, evolutionary theory and capability-based views of strategy may represent integrating metatheories that permit a consistent theoretical grounding across levels of analysis.

Finally, research in this domain has the potential to help in explaining relationships between strategy formulation, implementation, and organizational performance. To do so, however, will require sampling across levels of management. As an example, T. Porter (2006) used cross-level sampling to study how middle managers affect the realization of corporate-level environmental policies within operating units. Specifically, using data gathered from corporate, middle, and operating-level managers, her study demonstrates how middle managers' perceptions and attitudes concerning corporate-level environmental policies affect their leadership behaviors, and in turn, the number of environmental initiatives generated within their operating units. In contrast with studies focused exclusively or primarily at one level of management, multilevel studies of this type have the potential to shed light on the "black box" that intervenes between top management's intent and the realized strategy.

To produce cumulative findings, however, the challenge for such studies is to articulate a clear and consistent definition of the focal units (Hitt et al., 2007). How does one differentiate top, middle, and operating-level management theoretically so that observations of behavior across these levels are comparable between studies? Indeed, how does one differentiate middle management in a way that is theoretically and empirically consistent across studies? The theoretical definition of middle management remains somewhat ambiguous, and the inconsistent definition of the focal unit has blurred issues of comparability across studies. The fact that such ambiguity is common in management research (Hitt et al., 2007) should be no consolation if the goal is to produce a coherent body of knowledge. Thus, we repeat calls for more systematic, theory-driven sampling of middle managers combined with methods that triangulate the identification of managers (e.g., using organizational charts, senior management informants, and the a priori classification of middle managers into generic subtypes such as boundary spanners).

Although gathering data from multiple levels of managers in multiple organizations for which the researcher has rich contextual information is perhaps an ideal design for middle management studies, practicalities associated with this approach may make it unrealistic in the context of an individual study. One way in which the field might circumvent this constraint and thereby advance middle management research is through the development of research teams that coordinate efforts across individual studies. In other words, it is conceivable that, over time, teams of researchers, composed of faculty and doctoral students from one or more schools, could develop a collective "database" that addresses the methodological challenges inherent to multifirm, multilevel research.

Conclusion

Our objective in this article was to provide an overview of strategy research from a middle management perspective. The review provides evidence for the significant impact that research from a middle management perspective has had on the field's understanding of how strategy forms in large organizations. Perhaps the most significant contributions are an elaboration of various ways in which middle managers influence strategy making and organizational change, beyond mere implementation, and an increased understanding of process considerations leading either to effective strategy formation or dysfunctional role conflict. Although these contributions have indeed been significant, realizing the potential of this area of study will require that future research proceed in a more coordinated fashion. Given an increasingly turbulent global economy and an accompanying emphasis on creativity and innovation in organizations, the relevance and importance of strategy process research from a middle management perspective has never been greater, and we hope this review will contribute to the advancement of research in this area.

References

Amason, A. C. 1996. Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, 39(1): 123-148.

Andersen, T. J. 2004. Integrating decentralized strategy making and strategic planning processes in dynamic environments. *Journal of Management Studies*, 41(8): 1271-1299.

Andrews, K. 1971. The concept of corporate strategy. Homewood, IL: Irwin.

Ansoff, H. I. 1965. Corporate strategy. New York: McGraw-Hill.

Balogun, J., & Johnson, G. 2004. Organizational restructuring and middle manager sensemaking. Academy of Management Journal, 47: 523-549.

Barnett, W. P., & Burgelman, R. A. 1996. Evolutionary perspectives on strategy. *Strategic Management Journal*, 17: 5-19.

Bartlett, C. A., & Ghoshal, S. 1993. Beyond the M-form: Toward a managerial theory of the firm. *Strategic Management Journal*, 14: 23-46.

Beatty, C. A., & Lee, G. L. 1992. Leadership among middle managers: An exploration in the context of technological change. *Human Relations*, 45(9): 657-990.

Bourgeois, L. J. 1980. Consensus and performance. Strategic Management Journal, 1: 227-248.

Bower, J. L. 1970. Managing the resource allocation process. Boston: Harvard University Press.

Boyett, I., & Currie, G. 2004. Middle managers moulding international strategy. *Long Range Planning*, 37: 51-66. Burgelman, R. A. 1983a. A model of the interaction of strategic behavior, corporate context, and the concept of strategy. *Academy of Management Review*, 8: 61-70.

Burgelman, R. A. 1983b. A process model of internal corporate venturing in the diversified major firm. Administrative Science Quarterly, 28(2): 223-244.

Burgelman, R. A. 1991. Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research. *Organization Science*, 2: 239-262.

Burgelman, R. A. 1994. Fading memories: A strategic process theory of strategic business exit in dynamic environments. Administrative Science Quarterly, 39: 24-56.

Canales, J. I. 2004. Managerial action stemming from strategy formation: Does participation breed better strategy-making? Unpublished doctoral dissertation, IESE Business School, University of Navarra, Spain.

Cannon-Bowers, J. A., Salas, E., & Converse, S. 1993. Shared mental models in expert team decision making. In N. J. Castellan (Ed.), *Individual and group decision making*: 221-246. Hillsdale, NJ: Lawrence Erlbaum.

Carney, M. 2004. Middle management involvement in strategy development in not-for profit organizations: The director of nursing perspective. *Journal of nursing management*, 12(1): 13-21.

Carpenter, M. A., Geletkanycz, M. A., & Sanders, G. W. 2004. Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30(6): 749-778.

Chandler, A. D. 1962. Strategy and structure: Chapters in the history of the American industrial enterprise. Cambridge, MA: MIT press.

Child, J. 1972. Organizational structure, environment and performance: The role of strategic choice. Sociology, 6: 1-22.Crossan, M. M., Lane, H. W., & White, R. E. 1999. An organizational framework: From intuition to institution.Academy of Management Review, 24(3): 522-537.

- Currie, G., & Procter, S. J. 2005. The antecedents of middle managers' strategic contribution: The case of a professional bureaucracy. *Journal of Management Studies*, 42: 1325-1356.
- Daniels, K. 1998. Towards integrating emotions into strategic management research: Trait affect and perceptions of the strategic environment. *British Journal of Management*, 9(3): 163-168.
- Daniels, K. 2003. Asking a straightforward question: Managers' perceptions and managers' emotions. British Journal of Management, 14(1): 19-22.
- Dess, G. G. 1987. Consensus on strategy formulation and organizational performance: Competitors in fragmented industries. *Strategic Management Journal*, 8: 259-277.
- Dopson, S., & Stewart, R. 1990. What is happening to middle management? British Journal of Management, 1: 3-16.
- Dutton, J. E., & Ashford, S. J. 1993. Selling issues to top management. Academy of Management Review, 18: 397-428.
- Dutton, J. E., Ashford, S. J., O'Neill, R. M., Hayes, E., & Wierba, E. E. 1997. Reading the wind: How middle managers assess the context for selling issue to top managers. Strategic Management Journal, 18: 407-423.
- Dutton, J. E., Ashford, S. J., O'Neill, D. R., & Lawrence, K. A. 2001. Moves that matter: Issue selling and organizational change. Academy of Management Journal, 44(4): 716-736.
- Floyd, S. W., & Lane, P. M. 2000. Strategizing throughout the organization: Managing role conflict in strategic renewal. *Academy of Management Review*, 25: 154-177.
- Floyd, S. W., & Wooldridge, B. 1992. Middle management involvement in strategy and its association with strategic type: A research note. Strategic Management Journal, 13: 153-167.
- Floyd, S. W., & Wooldridge, B. 1996. The strategic middle manager: How to create and sustain competitive advantage. San Francisco: Jossey-Bass.
- Floyd, S. W., & Wooldridge, B. 1997. Middle management's strategic influence and organizational performance. Journal of Management Studies, 34: 465-485.
- Floyd, S. W., & Wooldridge, B. 1999. Knowledge creation and social networks in corporate entrepreneurship: The renewal of organizational capability. *Entrepreneurship Theory and Practice*, Spring: 123-143.
- Floyd, S. W., & Wooldridge, B. 2000. Building strategy from the middle: Reconceptualizing strategy process. Thousand Oaks, CA: Sage.
- Ford, J. D., Ford, L. W., & D'Amelio, A. 2008. Resistance to change: The rest of the story. Academy of Management Review, 33(2): 362-377.
- Fulop, L. 1991. Middle manager: Victims or vanguards of the entrepreneurial movement? *Journal of Management Studies*, 28(1): 25-44.
- Gioia, D. A., & Chittipeddi, K. 1991. Sensemaking and sensegiving in strategic change initiation. Strategic Management Journal, 12: 433-448.
- Guth, W. D., & MacMillan, I. C. 1986. Strategy implementation versus middle manager self-interest. Strategic Management Journal, 7: 313-327.
- Hambrick, D.C., Geletkanycz M. G., & Fredrickson, J. W. 1993. Top executive commitment to the status quo: Some tests of its determinants. Strategic Management Journal, 14: 401-418.
- Hambrick, D. C., & Mason, P. A. 1984. Upper echelons: The organization as a reflection of its top managers. Academy of Management Review, 9: 193.
- Hart, S. 1992. An integrative framework for strategy-making processes. Academy of Management Review, 17(2): 327-351.
- Hitt, M. A., Beamish, P. W., Jackson, S. E., & Mathieu, J. E. 2007. Building theoretical and empirical bridges across levels: Multilevel research in management. *Academy of Management Journal*, 50: 1385-1399.
- Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. 2002. Middle managers' perception of the internal environment for corporate entrepreneurship: Assessing a measurement scale. *Journal of Business Venturing*, 17: 253-273.
- Huff, J. O., Huff, A. S., & Thomas, H. 1992. Strategic renewal and the interaction of cumulative stress and inertia. Strategic Management Journal, 13: 55-75.
- Huy, Q. 2001. In praise of middle managers. Harvard Business Review, 47(September): 72-79.
- Huy, Q. 2002. Emotional balancing of organizational continuity and radical change: The contributions of middle managers. *Administrative Science Quarterly*, 37: 634-665.
- Jarzabkowski, P. 2005. Strategy as practice: An activity-based approach. London: Sage.
- Johnson, G., Langley, A., Melin, L., & Whittington, R. 2007. Strategy as practice: research directions and resources. Cambridge, UK: University Press.
- Johnson, G., Melin, L., & Whittington, R. 2003. Guest editors' introduction: Micro strategy and strategizing: Towards an activity-based view. *Journal of Management Studies*, 40(1): 1-22.

Kanter, R. M. 1982. The middle manager as innovator. Harvard Business Review, 60(July-August): 95-106.

Kellermanns, F. W., Walter, J., Lechner, C., & Floyd, S. W. 2005. The lack of consensus about strategic consensus: Advancing theory and research. *Journal of Management*, 31(5): 719-737.

Ketokivi, M., & Castañer, X. 2004. Strategic planning as an integrative device. Administrative Science Quarterly, 49: 337-365.

Kiesler, S., & Sproull, L. 1982. Managerial response to changing environments: Perspectives on problem sensing from social cognition. *Administrative Science Quarterly*, 27(4): 548-570.

King, A. W., & Zeithaml, C. P. 2001. Competencies and the causal ambiguity paradox. Strategic Management Journal, 22: 75-99.

Klimoski, R., & Mohammed, S. 1994. Team mental model: Construct or metaphor? *Journal of Management*, 20: 403-437.

Kodama, M. 2005. Knowledge creation through network strategic communities: Case studies on new product development in Japanese companies. *Long Range Planning*, 38: 27-49.

Kuratko, D. E., & Goldsby, M. G. 2004. Corporate entrepreneurs or rouge middle managers? A framework for ethical corporate entrepreneurship. *Journal of Business Ethics*, 55: 13-33.

Kuratko, D. F., Ireland, R. D., Covin, J. G., & Hornsby, J. S. 2005. A model of middle-level managers' entrepreneurial behavior. Entrepreneurship Theory and Practice, 29(6): 699-716.

Laine, P. M., & Vaara, E. 2006. Struggling over subjectivity: A discursive analysis of strategic development in an engineering group. *Human Relations*, 59(5): 611-636.

Lawrence, P. R., & Lorsch, J. W. 1967. Organization and environment. Boston: HBS Press.

Leonard-Barton, D. 1992. Core capabilities and core rigidities: A paradox in management new product development. Strategic Management Journal, 13: 111-125.

Lines, R. 2005. How social accounts and participation during change affect organizational learning. *Journal of Workplace Learning*, 17(3): 157-177.

Ling, Y., Floyd, S. W., & Baldridge, D. C. 2005. Reading the winds in multinational corporations: The impact of culture on issue selling behavior. *Journal of International Business Studies*, 36: 637-654.

Mair, J. 2005. Exploring the determinants of unit performance: The role of middle managers in stimulating profit growth. *Group and Organization Management*, 30: 263-288.

Mangaliso, M. P. 1995. The strategic usefulness of management information as perceived by middle managers. *Journal of Management*, 21(2): 231-250.

Mantere, S. 2005. Strategic practices as enablers and disablers of championing activities. *Strategic Organization*, 3: 157-184.

Mantere, S. 2008. Role expectations and middle manager strategic agency. *Journal of Management Studies*, 45(2): 294-316.

March, J. G. 1991. Exploration and exploitation in organizational learning. Organization Science, 2(1, Special Issue): 71-87.

Marginson, D. E. W. 2002. Management control systems and their effects on strategy formation at middle-management levels: Evidence from a UK Organization. Strategic Management Journal, 23: 1019-1031.

Markoczy, L. 2001. Consensus formation during strategic change. Strategic Management Journal, 22(11): 1013-1031.

McGrath, R. G. 2001. Exploratory learning, innovative capacity and managerial oversight. Academy of Management Journal, 44: 118-131.

Meyer, C. B. 2006. Destructive dynamics of middle management intervention in postmerger processes. *Journal of Applied Behavioral Science*, 42(4): 397-419.

Miles, M. B., & Snow, C. C. 1978. Organizational strategy, structure, and process. New York: McGraw-Hill.

Mintzberg, H. 1978. Patterns in strategy formation. Management Science, 24(9): 934-948.

Mintzberg, H., & Waters, J. A. 1985. Of strategies, deliberate and emergent. Strategic Management Journal, 6: 257-272.

Nelson, R., & Winter, S. 1982. An evolutionary theory of economic change. Cambridge, UK: Belknap.

Nonaka, I. 1991. The knowledge-creating company. Harvard Business Review, 69: 96-104.

Nonaka, I. 1994. A dynamic theory of knowledge creation. Organization Science, 5: 14-37.

Nonaka, I., & Takeuchi, H. 1995. The knowledge-creating company: How Japanese companies create the dynamics of innovation. Oxford, UK: Oxford University Press.

Pappas, J. M., & Wooldridge, B. 2007. Middle managers' divergent strategic activity: An investigation of multiple measures of network centrality. *Journal of Management Studies*, 44(3): 323-341.

- Pettigrew, A. M. 1992. On studying managerial elites. Strategic Management Journal, 13: 163-182.
- Porter, M. 1980. Competitive strategy: Techniques for analyzing industries and competitors. New York: Free Press.
- Porter, T. 2006. Inside greening: The role of middle managers' strategic processes, attitudes, and behaviors in corporate environmentalism. Unpublished doctoral dissertation, University of Massachusetts-Amherst.
- Rodan, S., & Galunic, C. 2004. More than network structure: How knowledge heterogeneity influences managerial performance and innovativeness. Strategic Management Journal, 25(6): 541-562.
- Rouleau, L. 2005. Micro-practices of strategic sensemaking and sensegiving: How middle managers interpret and sell change every day. *Journal of Management Studies*, 42: 1413-1441.
- Rumelt, R. P., Schendel, D., & Teece, D. J. 1991. Strategic management and economics. Strategic Management Journal, 12: 5-29.
- Salas, E., & Cannon-Bowers, J. A. 2001. The science of training: A decade of progress. Annual Review of Psychology, 52: 471-499.
- Schilit, W. K. 1987. An examination of the influence of middle-level managers in formulating and implementing strategic decisions. *Journal of Management Studies*, 24: 271-293.
- Schilit, W. K., & Locke, E. A. 1982. A study of upward-influence in organizations. *Administrative Science Quarterly*, 27(2): 304-316.
- Sillince, J., & Mueller, F. 2007 Switching strategic perspective: The reframing of accounts of responsibility. *Organization Studies*, 28: 155-176.
- Spender, J. C. 1989. Industry recipes: The nature and sources of managerial judgment. Oxford, UK: Basil Blackwell. Stroh, L. K., Brett, J. M., Baumann, J. P., & Reilly, A. H. 1996. Agency theory and variable pay compensation strategies. Academy of Management Journal, 39(3): 751-767.
- Tosi, H. 1992. The environment/organization/person contingency model: A meso approach to the study of organizations. Greenwich, CT: JAI.
- Uyterhoven, H. E. R. 1972. General managers in the middle. Harvard Business Review, 50(2): 75-85.
- Vaara, E., Kleymann, B., & Seristo, H. 2004. Strategies as discursive constructions: The case of airline alliances. *Journal of Management Studies*, 41(1): 1-35.
- Vilà, J., & Canales, I. J. 2008. Can strategic planning make strategy more relevant and build commitment over time? The case of RACC. *Long Range Planning*, 41: 273-290.
- Walsh, J. P. 1988. Selectivity and selective perception: An investigation of managers' belief structures and information processing. Academy of Management Journal, 31(4): 873-896.
- Westley, F. R. 1990. Middle managers and strategy: The micro-dynamics of inclusion. *Strategic Management Journal*, 11: 337-352.
- Wooldridge, B., & Floyd, S. W. 1989. Strategic process effects on consensus. *Strategic Management Journal*, 10: 295-302.
- Wooldridge, B., & Floyd, S. W. 1990. The strategy process, middle management involvement, and organizational performance. *Strategic Management Journal*, 11: 231-241.

Biographical Notes

Bill Wooldridge is a professor of strategic management in the Isenberg School of Management at the University of Massachusetts-Amherst. His current research projects explore how strategy is constructed through linked interactions between and across layers of management, and how individual-level competencies and practices combine and cumulate into organizational-level capabilities.

Torsten Schmid is a postdoc and research program manager at the University of St. Gallen in Switzerland. His research focuses on issues of corporate entrepreneurship and strategy process in large organizations, including the evolution of strategic initiatives, organizational ambidexterity, and strategic leadership.

Steven W. Floyd is a professor of strategic management at the University of St. Gallen in Switzerland. His research interests center on corporate entrepreneurship and strategy process, including such topics as the evolution of strategic initiatives, the development of entrepreneurial competence, and the practices associated with strategy rituals.