Essays on the Development of a Theory of Strategy Formation in Hospitals

Der Wirtschaftswissenschaftlichen Fakultät der

Gottfried Wilhelm Leibniz Universität Hannover

zur Erlangung des akademischen Grades

Doktor der Wirtschaftswissenschaften

- Doctor rerum politicarum –

genehmigte Dissertation

von

M. Sc. Jan Simon Schrader

geboren am 22.01.1988 in Hannover

2019

Referent:	Prof. Dr. Hans-Gerd Ridder
Korreferent:	Prof. Dr. Axel Haunschild
Tag der Promotion:	24.04.2019

Abstract

Hospitals experienced far-reaching changes over the past decades. A new market-driven economic environment leads to an intensified competition on the hospital market and challenges the traditional understanding of the strategy formation process. Given that strategic decisions must meet economic and medical demands, strategic issues cannot longer be solely developed and processed by management professionals. Instead, successful strategy formation also depends on the development and processing of unintended strategic issues generated through the expertise of medical professionals. Consequently, manager's competence and medical expertise have to be connected to capitalize on their mutually exclusive knowledge. In sum, the literature is unambiguous in that hospitals represent complex organizations in which the simultaneous processing of intended strategic issues from the board of executives and unintended strategic issues from medical professionals is of utmost importance. However, empirical evidence on strategy formation as a collaboration between management and medical professionals is scarce and theory of strategy formation in hospitals is poor. The aim of this doctoral thesis is to address these research gaps by developing a theory of strategy formation in hospitals, thereby understanding how and why strategic issues are processed and integrated into the strategic agenda.

In total, the doctoral thesis consists of four research articles. The first article explores how strategy emerges in a hospital across organizational levels to be finally manifested at the strategy agenda. A conceptual frame of the emergence of strategy is developed and attentional mechanisms that influence the strategy formation process are specified. The second article identifies key features of structure and interaction and specifies how they affect the processing and integration of intended and unintended strategic issues. These insights result in a nascent theory of strategy formation in hospitals. The third article focuses on how the structural and strategic contexts influence strategic issues' evolution. Thereby, five evolution paths of strategic issues are elaborated and two precise selection mechanisms of strategic issues are identified. The final article is a sequential replication of the second study in order to elaborate the previously generated nascent theory of strategy formation and establish its validity. Additionally, the study identifies the "organizational spirit" as a relevant construct in the strategy formation process, thereby extending the theory of strategy formation in hospitals.

Keywords: Strategy Formation; Strategic Issues; Strategic Agenda; Case Study; Qualitative Research; Theory Development

Zusammenfassung

Krankenhäuser haben in den letzten Jahrzehnten einen tiefgreifenden Wandel erlebt. Ein neues marktorientiertes Wirtschaftsumfeld führt zu einem verstärkten Wettbewerb auf dem Krankenhausmarkt und stellt das traditionelle Verständnis des Strategiebildungsprozesses in Frage. Da strategische Entscheidungen sowohl wirtschaftlichen als auch medizinischen Anforderungen entsprechen müssen, können strategische Themen nicht mehr ausschließlich von der Managementebene entwickelt und bearbeitet werden. Vielmehr hängt eine erfolgreiche Strategiebildung auch von der Bearbeitung ungeplanter strategischer Themen ab, die durch die Expertise der Mediziner entstehen. Aus diesem Grund müssen die Managementkompetenz und das medizinische Fachwissen kombiniert werden, um das einzigartige Wissen beider Seiten nutzen zu können. Die Literatur zeigt eindeutig, dass Krankenhäuser komplexe Organisationen repräsentieren, in denen die gleichzeige Bearbeitung von intendierten Themen der Geschäftsführung und ungeplanten Themen der Chefärzte von zentraler Bedeutung ist. Empirische und theoretische Erkenntnisse über den Prozess der Strategiebildung, als eine Zusammenarbeit zwischen Management und Medizinern, sind jedoch rar. Das Ziel der vorliegenden Doktorarbeit ist es, diese Forschungslücken zu schließen und eine Theorie der Strategiebildung in Krankenhäusern zu entwickeln, um zu verstehen, wie und warum strategische Themen in Krankenhäusern verarbeitet und in die strategische Agenda integriert werden.

Die Doktorarbeit besteht aus insgesamt vier Forschungsartikeln. Der erste Artikel untersucht, wie sich eine Strategie in einem Krankenhaus über Organisationsebenen hinweg entwickelt und in der strategischen Agenda manifestiert. Dabei werden ein konzeptioneller Rahmen der Strategieemergenz erarbeitet sowie Mechanismen spezifiziert, die den Strategiebildungsprozess beeinflussen. Der zweite Artikel identifiziert die wichtigsten Merkmale der Struktur und Interaktion und beschreibt, wie sich diese auf die Verarbeitung und Integration von intendierten und ungeplanten strategischen Themen auswirken. Die Ergebnisse resultieren in einer ersten Theorie der Strategiebildung in Krankenhäusern. Im dritten Artikel werden fünf Entwicklungspfade strategischer Themen herausgearbeitet sowie zwei Selektionsmechanismen strategischer Themen identifiziert. Der letzte Artikel ist eine sequentielle Replikation der zweiten Studie, mit dem Ziel, die Theorie der Strategiebildung in Krankenhäusern zu spezifizieren und die Validität zu überprüfen. Darüber hinaus wird der „Organisationale-Spirit" als relevantes Konstrukt im Strategiebildungsprozess herausgearbeitet und die Theorie auf diese Weise erweitert.

Stichwörter: Strategiebildung; Strategische Themen; Strategische Agenda; Fallstudie; Qualitative Forschung; Theorieentwicklung

Contents

Preface 1 - 11

Paper 1:

The Emergence of Strategy: Capturing the Dynamics of Strategy Formation Across Levels 12 - 57

Paper 2:

Processing of Intended and Unintended Strategic Issues and Integration into the Strategic Agenda 58 - 87

Paper 3:

Strategy Formation in Complex Organizations - The Evolution of Strategic Issues in Hospitals 88 - 122

Paper 4:

Strategic Collaboration between Management and Medical Professionals - An Elaboration of the Theory of Strategy Formation in Hospitals 123 - 158

Preface

Motivation and Research Objectives

The characteristics of hospitals challenge the traditional view on strategy formation as an analytical and rational planned decision-making process (Hutzschenreuter & Kleindienst, 2006; Zimmerman, Lindberg, & Plsek, 1998). Studies reveal that based on their external and internal constraints, hospitals are specific in their strategic orientation (Currie, Waring, & Finn, 2008; Sminia, 2009). Specifically, governmental regulation (Ridder, Doege, & Martini, 2007), rising health expenditures, and consolidation processes (Tiemann & Schreyoegg, 2012) constitute a new market-driven economic environment which leads to an intensified competition in the hospital market (Al-Amin, Zinn, Rosko, & Aaronson, 2010). Additionally, internal conditions, for example, tensions between the different professions (i.e., managers, physicians, and nurses), and a lack of relevant resources (e.g., IT structures and financial support) affect hospitals' strategy formation (Alexander, D'Aunno, & Succi, 1996; Bate, 2000). Given these external and internal circumstances and that strategic decisions must accord with economic and medical demands, strategic issues in hospitals cannot solely be developed, selected, and integrated into the strategic agenda by management professionals. Instead, authors emphasize the collaboration between management and medical professionals and the use of their mutually exclusive knowledge as crucial in strategy formation (Bode & Maerker, 2014; Noordegraaf, 2016). On the one hand, it is not possible for mangers to obtain the medical expertise that medical professionals hold (Solstad & Pettersen, 2010). On the other hand, exactly this knowledge is essential for the strategic development of the entire organization (Wells, Lee, McClure, Baronner, & Davis, 2004). Thus, effective strategy formation relies on both the integration of intended strategic issues introduced by the board of executives and unintended strategic issues stemming from the medical professionals (Chreim & MacNaughton, 2016; Ford-Eickhoff, Plowman, & McDaniel, 2011).

However, despite the trend towards the involvement of medical professionals in strategic decisions (Buchanan, Addicott, Fitzgerald, Ferlie, & Baeza, 2007; Llewellyn, 2001), empirical and theoretical research on strategy formation as a combination of management and medical expertise is scarce. The majority of studies provide only partial perspectives of the strategy formation process (Mirabeau & Maguire, 2014; Sminia, 2009) and a "one point-in-time snapshot of strategy" (Shortell, Morrison, & Robbins, 1985, p. 248). Thus, it remains questionable how the entire strategy formation process is conducted and how the strategic agenda actually comes about. Overall, "…there is a clear need to enrich our understanding of the complex integrative strategy process and the dynamic interaction between emergence and planning" (Andersen, 2004, p. 1273).

This doctoral thesis addresses these gaps by investigating the collaboration between management and medical professionals, thereby focusing on the simultaneous processing of intended and unintended strategic issues. Specifically, the collaboration is conceptualized by the renowned differentiation into intended and unintended strategic issues (Mintzberg, 1978). In hospitals, *intended* strategic issues are introduced by the board of executives and result from their management expertise. If these issues are integrated into the strategic agenda, they are called *deliberate strategies*. By contrast, *unintended* strategic issues are initiated by the medical professionals based on their medical expertise. If these issues are integrated into the strategic agenda, they are called *emergent* strategies.

Although, the literature is unambiguous in that effective strategy formation in hospitals is dependent on the collaboration between management and medical professionals, a theory of strategy formation in hospitals does not exist so far. Thus, the aim of this doctoral thesis is to explore the following research questions:

- How and why do intended and unintended strategic issues emerge in hospitals?

– How and why are intended and unintended strategic issues processed into deliberate and emergent strategies?
– How and why are intended and unintended strategic issues selected in the strategy formation process?
– How and why are deliberate and emergent strategies integrated into the strategic agenda?

To systematically address these research questions, this doctoral thesis consists of four individual research articles that are described in the following paragraphs.

Description of the Research Articles

Article 1 is based on a longitudinal single case study that aims to capture the formation of strategy across the individual, collective, and organizational level. To date, most strategy formation research has focused on a single level of analysis and has left significant questions about the emergence of strategy across levels unanswered (for a review, see Hutzschenreuter & Kleindienst, 2006). Thus, adopting a multilevel perspective helps to foster a more integrated understanding of strategy formation and the identification of underlying mechanisms that shape the formation process across levels. Specifically, the emergence of strategy is addressed by (1) investigating strategic processes at the individual, collective, and organizational level (Burgelman, 1983; Mintzberg & Waters, 1985) and (2) exploring patterns of organizational attention that are the key to its emergence (Ocasio & Joseph, 2006). To do so, strategy formation is viewed as a bottom-up process in which individuals' strategic considerations inform collective issue considerations and as attentional mechanisms, which are conceptualized by the attention-based view (Dutton, Ashford, O'Neill, & Lawrence, 2001; Ocasio, 1997). The integration of both strategy formation research and the attention-based view sheds light on the emergence of strategy and helps to explore the research question of how and why do attentional mechanisms shape strategy formation across levels. To achieve a detailed understanding of the mechanisms affecting strategy formation across levels, a longitudinal single case study approach is

adopted. Based on the in-depth analysis of the empirical findings a conceptual frame is developed that indicates how strategic issue considerations emerge across levels to finally manifest at the strategic agenda. Furthermore, three different attentional mechanisms are specified that shape the strategy formation process across levels. Specifically, the study indicates that at the individual level strategic issue considerations are characterized by a balanced issue understanding comprising both medical and economic values. However, at the collective level a lack of specified *rules* inhibits the active diagnosis of strategic issues and issue considerations are mainly characterized by a passive reporting of medical themes. Further, the integration of strategic issues at the organizational level is hampered by unclear communication and procedural *channels*, resulting in a high replication of themes. Finally, the manifestation of strategic issues in the strategic agenda is impeded by a lack in *articulation.* As a consequence, many strategic issues are discussed in the formation process but not included in the strategic agenda. Overall, the findings support the assumption that strategy formation can be conceptualized as a macro phenomenon that emerges across the individual, collective, and organizational level (Foss & Lindenberg, 2013). Furthermore, the study provides a more holistic picture of how strategy emerges across these levels and specifies the underlying mechanisms that shape strategy formation across levels (Ocasio, 1997).

Article 2 explores the processing of intended and unintended strategic issues in hospitals and their integration into the strategic agenda. The literature indicates that strategy formation in hospitals depends on the collaboration between management and medical professionals (Chreim & MacNaughton, 2016; Ford-Eickhoff et al., 2011). However, there is little empirical evidence about the formation of strategies in hospitals. This article addresses this gap by investigating into strategy formation as a combination of management and medical expertise. Specifically, the case study asks how intended and unintended strategic issues are processed into deliberate and emergent strategies and how deliberate and emergent strategies are integrated

into the strategic agenda of a hospital. The empirical findings reveal that the collaboration between managers and physicians in medical centers is adequate for both the operationalization of intended strategic issues and development of unintended ones. However, the processing of intended and unintended strategic issues is hampered by unclear *structures* and deficient *interaction*. Furthermore, the findings suggest that strategic issues have the best chance of succeeding if (1) interest groups are concerned with the strategic issue, (2) prospective profits are estimated, and (3) relevant decision makers are involved early on. Nevertheless, the analysis shows that intended and unintended strategic issues are not pari passu elements of strategy formation. More precisely, the integration of deliberate and emergent strategies is dominated by intended strategic issues becoming deliberate strategies. Based on the empirical findings a tentative model of strategy formation in hospitals is developed. This model emphasizes an *interplay* between structure and interaction in the strategy formation process. Specifically, deficient structural elements influence interaction processes, which are not goal oriented in the initial sense. In turn, inefficient interaction leads to the medical center structure not being used as expected. In sum, the study provides a better understanding of how intended and unintended strategic issues are processed and integrated in strategy formation and contributes by generating a first tentative theory of strategy formation in hospitals.

Article 3 investigates strategy formation in hospitals by empirically tracking the evolution of strategic issues. Given that strategy content is investigated far more often than strategy process (Hafsi & Thomas, 2005), the question how strategic issues evolve has received less attention than it merits (Gavetti & Rivkin, 2007). Especially, scholars highlight the need to pay closer attention to the effect of the structural and strategic contexts on strategic issues' evolution (Shepherd & Rudd, 2014; Veronesi, Kirkpatrick, & Altanlar, 2015). Furthermore, it remains vague how the selection of strategic issues actually takes place and why some strategic issues are selected during strategy formation while others are not (Canales, 2015). This study aims to

address these gaps by empirically investigating the evolution of strategic issues in hospitals. Theoretically, the study builds on the process model of strategy-making (Burgelman, 1983) and conceptualizes strategy formation as an evolutionary process of variation, selection, and retention. Overall, the case study identifies both induced strategic issues postulated by the executive board and autonomous strategic issues initiated by the medical professionals. Moreover, five different development paths of strategic issues are specified and a model of their evolution is developed. Specifically, the study shows that strategic issues are more likely to be selected in the strategy formation process, if they are operationalized and critically analyzed through intensive communication processes. The ways and frequency of actors' communication thus constitute an *"internal selection criterion"*. Additionally, it is indicated that specific *"content-related selection criteria"* are mandatory for a strategic issue's selection and retention in the strategic agenda. In this respect, differences between induced and autonomous strategic issues are demonstrated. Specifically, the study reveals that autonomous strategic issues are only selected if all selection criteria (interactional and content-related) are met. In contrast, induced strategic issues are selected even if the interactional selection criterion is not fulfilled. The selection of strategic issues can finally be described as a two-stage mechanism (first the interactional selection criterion, then the content-related selection criteria) and the content-related selection criteria are a necessary prerequisite for successful selection. In sum, Article 3 demonstrates how strategic issues evolve differently over time, thereby specifying the role of the structural and strategic contexts in strategic issues' evolution (Veronesi et al., 2015).

Article 4 is a sequential replication of the case study described in the second research article, in order to elaborate the nascent theory of strategy formation in hospitals in a comparable setting (Edmondson & McManus, 2007). More precisely, the aim of this study is to explore how intended and unintended strategic issues emerge, how they are processed, and, finally, how they

are integrated into the strategic agenda. Thus, providing a better understanding of strategy formation in hospitals. The systematic comparison of patterns and relationships found in this study with those turned out in the previous study provides the basis for theoretical inferences. Specifically, the empirical findings validate the proposed relationship of the nascent theory of an interplay between *structure a*nd *interaction*. However, in contrast to the results of the second research article, this study indicates that well developed structural elements lead to efficient interaction and vice versa. Furthermore, the replication study refines the theory of strategy formation in hospitals by giving detailed insights into the interaction processes. Specifically, the data reveal transparency as an important parameter in decision-making and informal procedures as crucial to rapid strategic processing. In addition, the study also extends the nascent theory of strategy formation by identifying *organizational spirit* as a new construct, relevant in the strategy formation process. Overall, through the systematic comparison of the two cases a mechanism of strategy formation is identified that explains how capable an organization is in strategy formation. In this respect, the study shows that an aligned interplay between structure, interaction, and organizational facilitates the integration of management and medical expertise in strategy formation and results in a comprehensive strategic agenda.

Conclusion and Contribution

Effective strategy formation in hospitals depends on the collaboration between management and medical professionals and the processing of both intended and unintended strategic issues (Bode & Maerker, 2014; Noordegraaf, 2016). However, empirical evidence on strategy formation as a collaboration between management and medical professionals is scarce and theory of strategy formation in hospitals is poor. This doctoral thesis addresses these gaps and contributes by generating (Article 1 & 2) and elaborating (Article 3 & 4) a theory of strategy formation in hospitals. Specifically, the four research articles give detailed insights into the emergence, processing, selection, and integration of intended and unintended strategic issues, thereby

providing a better understanding of strategy formation in hospitals. Overall, the doctoral thesis contributes to the literature in several ways:

First, all four research articles reveal that the collaboration of management and medical professionals in medical centers is an adequate template for the *emergence* of both intended and unintended strategic issues. The medical center structure avoids tribalism and promotes the exchange of mutually exclusive knowledge. Furthermore, the conceptualization of strategy formation as a multi-level phenomenon and the identification of attentional mechanisms improve the understanding of the emergence of strategic issues across levels (see Article 1).

The second contribution relates to the *processing* of intended and unintended strategic issues. It is demonstrated that *structure* and *interaction* matter in strategy formation. Unclear structures and deficient interactions hamper the processing of strategic issues (see Article 2). In addition, by identifying *organizational spirit* as relevant in the processing of strategic issues, the understanding of the strategy formation process is further enhanced. Specifically, the doctoral thesis reveals that clear structures, efficient interaction, and positive organizational promote the successful processing of strategic issues (see Article 4).

Third, the doctoral thesis elaborates two precise *selection* mechanisms in strategy formation. Specifically, it demonstrates that interaction does not only affect the processing of intended and unintended strategic issues but also their *selection*. Thus, apart from specific *content-related criteria*, which are mandatory for a strategic issue's selection, the ways and frequency of actors' communication constitute an *interactional selection criterion*.

Fourth, the doctoral thesis contributes to the literature by demonstrating an *interplay* between structure, interaction, and organizational spirit. On the one hand, deficient structural elements influence the interaction processes, which are not goal oriented in the initial sense and lack the systematic processing of strategic issues. In turn, inefficient interaction leads to the medical center structure not being used as expected (see Article 2). On the other hand, clear structures

and efficient interaction facilitate the development of a positive organizational spirit, which is characterized by boundary management and continuity in leadership positions. In turn, boundary management, for example, in the form of the creation of interdisciplinary working groups, supports the ability to understand the positions of other actors and, thus, makes decision making more constructive (see Article 4).

Finally, the doctoral thesis provides detailed insight into the *integration* of strategic issues into the strategic agenda and specifies a *mechanism* that explains how strategy formation unfolds in hospitals. Specifically, it shows that the interplay between unclear structures and deficient interaction processes results in an unbalanced integration into strategic agenda dominated by deliberate strategies (see Article 2). Conversely, the interplay between clear structures, efficient interaction, and a positive organizational spirit results in a comprehensive strategic agenda (see Article 4). Thus, the interplay between structure, interaction, and organizational spirit is identified as a mechanism of strategy formation that explains how capable a hospital is in strategy formation and for this reason it is called *strategy making capabilities.*

References

Al-Amin, M., Zinn, J., Rosko, M. D., & Aaronson, W. (2010). Specialty hospital market proliferation: Strategic implications for general hospitals. *Health Care Management Review*, *35*(4), 294–300. doi:10.1097/HMR.0b013e3181e04a06

Alexander, J. A., D'Aunno, T. A., & Succi, M. J. (1996). Determinants of profound organizational change: choice of conversion or closure among rural hospitals. *Journal of Health and Social Behavior*, *37*(3), 238–251.

Andersen, T. J. (2004). Integrating decentralized strategy making and strategic planning processes in dynamic environments. *Journal of Management Studies*, *41*(8), 1271–1299. doi:10.1111/j.1467-6486.2004.00475.x

Bate, P. (2000). Changing the culture of a hospital: From hierarchy to networked community. *Public Administration*, *78*(3), 485–512. doi:10.1111/1467-9299.00215

Bode, I., & Maerker, M. (2014). Management in medicine or medics in management?: The changing role of doctors in German hospitals. *International Journal of Public Sector Management*, *27*(5), 395–405. doi:10.1108/IJPSM-06-2012-0068

Buchanan, D. A., Addicott, R., Fitzgerald, L., Ferlie, E., & Baeza, J. I. (2007). Nobody in charge: Distributed change agency in healthcare. *Human Relations*, *60*(7), 1065–1090. doi:10.1177/0018726707081158

Burgelman, R. A. (1983). A model of the interaction of strategic behavior, corporate context, and the concept of strategy. *Academy of Management Review*, *8*(1), 61–70. doi:10.5465/AMR.1983.4287661

Canales, J. I. (2015). Sources of selection in strategy making. *Journal of Management Studies*, *52*(1), 1–31. doi:10.1111/joms.12101

Chreim, S., & MacNaughton, K. (2016). Distributed leadership in health care teams: Constellation role distribution and leadership practices. *Health Care Management Review*, *41*(3), 200–212.

Currie, G., Waring, J., & Finn, R. (2008). The limits of knowledge management for UK public services modernization: The case of patient safety and service quality. *Public Administration*, *86*(2), 363–385. doi:10.1111/j.1467-9299.2007.00705.x

Dutton, J. E., Ashford, S. J., O'Neill, R. M., & Lawrence, K. A. (2001). Moves that matter: Issue selling and organizational change. *Academy of Management Journal*, *44*(4), 716–736.

Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review*, *32*(4), 1155–1179.

Ford-Eickhoff, K., Plowman, D. A., & McDaniel, R. R. (2011). Hospital boards and hospital strategic focus. *Health Care Management Review*, *36*(2), 145–154. doi:10.1097/HMR.0b013e3182099f6e

Foss, N. J., & Lindenberg, S. (2013). Microfoundations for strategy: A goal-framing perspective on the drivers of value creation. *Academy of Management Perspectives*, *27*(2), 85–102. doi:10.5465/amp.2012.0103

Gavetti, G., & Rivkin, J. W. (2007). On the origin of strategy: Action and cognition over time. *Organization Science*, *18*(3), 420–439. doi:10.1287/orsc.1070.0282

Hafsi, T., & Thomas, H. (2005). The field of strategy. *European Management Journal*, *23*(5), 507–519. doi:10.1016/j.emj.2005.09.006

Hutzschenreuter, T., & Kleindienst, I. (2006). Strategy-process research: What have we learned and what is still to be explored. *Journal of Management*, *32*(5), 673–720. doi:10.1177/0149206306291485

Llewellyn, S. (2001). "Two-way windows": Clinicians as medical managers. *Organization Studies*, *22*(4), 593–623.

Mintzberg, H. (1978). Patterns in strategy formation. *Management Science*, *24*(9), 934–948. doi:10.1287/mnsc.24.9.934

Mintzberg, H., & Waters, J. A. (1985). Of strategies, deliberate and emergent. *Strategic Management Journal*, *6*(3), 257–272. doi:10.1002/smj.4250060306

Mirabeau, L., & Maguire, S. (2014). From autonomous strategic behavior to emergent strategy. *Strategic Management Journal*, *35*(8), 1202–1229. doi:10.1002/smj.2149

Noordegraaf, M. (2016). Reconfiguring professional work: Changing forms of professionalism in public services. *Administration & Society*, *48*(7), 783–810. doi:10.1177/0095399713509242

Ocasio, W. (1997). Towards an attention-based view of the firm. *Strategic Management Journal*, *18*(S1), 187–206.

Ocasio, W. P., & Joseph, J. (2006). Governance channels and organizational design at General Electric: 1950-2001. In R. M. Burton, B. Eriksen, D. D. Hakonsson, & C. C. Snow (Eds.), *Information and Organization Design Series. Organization Design. Evolving the state of the art* (6th ed., pp. 267–284). Springer.

Ridder, H.-G., Doege, V., & Martini, S. (2007). Differences in the implementation of diagnosis-related groups across clinical departments: A German hospital case study. *Health Services Research*, *42*(6 Pt 1), 2120–2139.

Shepherd, N. G., & Rudd, J. M. (2014). The influence of context on the strategic decision-making process: A review of the literature. *International Journal of Management Reviews*, *16*(3), 340–364. doi:10.1111/ijmr.12023

Shortell, S. M., Morrison, M. A., & Robbins, S. (1985). Strategy making in health care organizations: A framework and agenda for research. *Medical Care Review*, *42*(2), 219–266.

Sminia, H. (2009). Process research in strategy formation: Theory, methodology and relevance. *International Journal of Management Reviews*, *11*(1), 97–125. doi:10.1111/j.1468-2370.2008.00253.x

Solstad, E., & Pettersen, I. J. (2010). The role of path dependency in a hospital merger. *Qualitative Research in Organizations and Management: An International Journal*, *5*(3), 238–258.

Tiemann, O., & Schreyoegg, J. (2012). Changes in hospital efficiency after privatization. *Health Care Management Science*, *15*(4), 310–326. doi:10.1007/s10729-012-9193-z

Veronesi, G., Kirkpatrick, I., & Altanlar, A. (2015). Clinical leadership and the changing governance of public hospitals: Implications for patien experience. *Public Administration*, *93*(4, SI), 1031–1048. doi:10.1111/padm.12183

Wells, R., Lee, S. Y.D., McClure, J., Baronner, L., & Davis, L. (2004). Strategy development in small hospitals: Stakeholder management in constrained circumstances. *Health Care Management Review*, *29*(3), 218–228.

Zimmerman, B., Lindberg, C., & Plsek, P. E. (1998). *Edgeware: Insights from complexity science for health care leaders*. Irving: VHA.

Paper 1

The Emergence of Strategy:

Capturing the Dynamics of Strategy Formation Across Levels

Hoon, C.; Schrader, J. S.; Ridder, H.-G.

Based on the following previous versions:

Ridder, H.-G.; Hoon, C.; Schrader, J.S. (2014): Strategic Problem Fomulation: Capturing the Dynamics of Strategic Problem Formulation Across Multiple Levels. Paper presented at the VHB Kommission Personal Annual Conference, Graz, Austria, September, 25th – 26th, 2014.

Hoon, C.; Schrader, J.S.; Ridder, H.-G. (2015): The Emergence of Strategy: Capturing the Dynamics of Strategy Formulation Across Levels. Paper presented at the 75th Annual Meeting of the Academy of Management, Vancouver, British Columbia, Canada, August, 7th – 11th, 2015.

The Emergence of Strategy:

Capturing the Dynamics of Strategy Formation Across Levels

ABSTRACT

This paper develops a conceptual frame of the emergence of strategy formation in a public hospital. For a better understanding of strategy as a multi-level phenomenon we seek to explore how strategy forms across levels. To do so, we integrate a prominent tradition in strategy research, namely strategy formation as patterns of action and interaction, with the attention-based view in which strategy formation is viewed as attentional processing. We indicate how strategy forms from the individual level, the collective level, and the organizational level to finally be manifested at the strategic agenda and specify the attentional mechanisms that affect strategy formation across each of these levels. The study theorizes how individual strategic issue understanding coalesce into the strategic issue diagnosis of groups as well as into organizational issue consideration and explains why unclear rules, a lack in channeling as well as a gap in articulation hinder strategy formation. First, we contribute by integrating strategy formation research and the attention-based view, thereby minimizing the trend toward framework proliferation in strategy research. Second, this paper contributes attentional mechanisms to strategy formation literature, thereby providing a richer picture of how strategy emerges across levels and the underlying mechanisms shaping the emergence of strategy.

Keywords: Strategy Formation; Attention-Based View; Multi-Level Research; Case Study

INTRODUCTION

Strategy formation has been receiving attention in academia for a long time. Distinguishing strategy formation from strategic *formulation* has become canonical, allowing us to identify strategy as a tangible phenomenon emerging from decision streams. By distinguishing the intended, e.g., planned strategy from the emergent strategy (Mintzberg, 1978; Mintzberg & Waters, 1985), strategy is understood as a pattern forming from a stream of decisions and actions over time (Mintzberg & McHugh, 1985). This perspective allows for a bottom-up conception of strategy formation in which strategy emerges from distributed decision authorities, a high level of participation, and the integration of groups and executive committees. The central assumption is that bottom-up strategy making positively contributes to organizational outcomes in complex organizations (Andersen, 2004, p. 1289). Various studies consider strategy formation in terms of the process in which strategy making is spread over the management hierarchy and explore the phases related to activities at particular hierarchical levels in the organization (Burgelman, 1983; Elbanna, 2006; Mintzberg, 1994; Noda & Bower, 1996). Further studies investigate the strategic role of middle managers (Floyd & Wooldridge, 1996), pay attention to selling issues to top management (Dutton & Ashford, 1993; Dutton, Ashford, O'Neill, & Lawrence, 2001), explore the role of top management teams or strategy committees (Baer, Dirks, & Nickerson, 2013), or endeavor to understand the micro activities of the various actors involved in strategy (Jarzabkowski, Balogun, & Seidl, 2007).

Most strategy formation research has especially focused on a particular level of analysis, primarily the individual, group, organization, or industry (for a review, see Hutzschenreuter & Kleindienst, 2006). This is understandable, given the complex and somewhat unique nature of each level of analysis. However, the tendency toward within-level research has left important questions regarding the emergence of strategy formation across levels largely unanswered, despite recognition of the relevance of insights from studying strategy as a multi-level

phenomenon (Hitt, Beamish, Jackson, & Mathieu, 2007). By paying attention to multilevel and cross-level effects, researchers have acknowledged the multilevel nature of strategy for quite some time. Indeed, the "*emergence of strategy*" has been at the core of several streams of debates. Behavioral strategy scholars, for example, note to provide insight into how micro-level behaviors scale to macro-level strategy phenomena (Powell, Lovallo, & Fox, 2011). Others call to put more emphasis on the microfoundations (Felin & Foss, 2005) or the micro-processes of strategy (Barney & Felin, 2013). Similarly, efforts have been undertaken to incorporate multi-level issues in strategy as a result of advances in multilevel theory (Klein & Kozlowski, 2000). Overall, adopting a multilevel perspective helps to identify principles and mechanisms that foster a more integrated understanding of strategy formation across organizational levels.

Based upon these claims, we view strategy formation through the lens of strategic issues (Langley, Mintzberg, Pitcher, Posada, & Saint-Macary, 1995) and conceptualize strategy as forming from bottom-up forces. Specifically, individuals' considerations towards strategic issues inform groups' issue considerations and converge into strategic issue considerations of executive committees (representing the whole corporation), to finally manifest at the organizational strategic agenda. Thus, strategy formation is viewed as a multi-level phenomenon, with an idiosyncratic phenomenon transcending its level of origin (Kozlowski, Gully, Nason, & Smith, 1999; Kozlowski & Klein, 2000). As such, exploring strategy formation across levels helps to ensure a complete understanding of strategy and macro-strategy phenomena (Hutzschenreuter & Kleindienst, 2006).

In this respect, we address the emergence of strategy by exploring strategy formation at the individual, collective, and organizational level (Burgelman, 1983; Mintzberg & Waters, 1985) and by investigating the patterns of organizational attention that are key to its emergence (Ocasio, 1997; Ocasio & Joseph, 2006). To do so, we view strategy formation as strategic issue considerations of individuals and collectives (Dutton et al., 2001) and as attentional

mechanisms as captured under the label of the attention-based view (Ocasio, 1997). We address the research question of: *How and why do attentional mechanisms shape strategy formation across levels?*

In this study, we draw on a nested, embedded, longitudinal, single case study as a basis for extending theory (Gibbert, Ruigrok, & Wicki, 2008). We focus on strategy formation in a public health care organization and track the formation of strategy in a bottom-up manner over a two-year period. We develop a conceptual frame of strategy formation indicating that strategy forms from individuals' strategic issue understanding, collective issue diagnosis, and an organizational level issue integration, to its final manifestation at the strategic agenda. Further, we demonstrate how and why strategy formation is shaped by three attentional mechanisms. While the convergence from individual strategic issue understanding to collective issue diagnosis is driven by *rules*, the dissemination of issue consideration from the collective to the organizational level is administered by *channeling*. Finally, the attentional mechanism of *articulation* impacts the manifestation of strategy at the organization's strategic agenda. The conceptual frame explains why unclear rules, a lack in channeling, and a gap in strategy articulation hinder strategy formation.

We contribute by providing an enriched understanding of strategy formation. First, we contribute by integrating prominent research streams in strategy, namely strategy formation research and the attention-based view. By introducing our conceptual frame, we provide a more holistic representation of strategy formation, thereby minimizing the trend toward framework proliferation (Hutzschenreuter & Kleindienst, 2006). Second, this paper contributes attentional mechanisms to strategy formation literature, thereby providing a richer picture of how strategy emerges across levels and specifying the underlying mechanisms that shape strategy formation at each of these levels. Finally, our study refines the attention-based view (Ocasio, 1997) by introducing decision makers' articulation, a concept that extends the attentional mechanism

prevalent in the attention-based view.

The Emergence of Strategy: Moving Beyond Level Centric Approaches

In the following, we illustrate the notion of strategy formation and seek to introduce the claim for exploring the *emergence of strategy*. Afterwards, we connect strategy formation research viewing strategy as forming from iterated actions and interactions of individuals and collectives (Burgelman, 1983; Mintzberg & Waters, 1985) with the research realms viewing strategy formation as attentional processing (Ocasio, 1997) to generate our research question.

Rather than strategies being planned in a top-down, rational and analytical way, the view of strategies forming in a bottom-up way has become a dominant approach (Dutton et al., 2001; Mintzberg, 1994). In this bottom-up conception, the top management's role in strategy formation is not necessarily critical. Instead, strategy making is decentralized in decision structures, allowing strategic issue considerations of individuals, business unit strategy groups, and executive committees representing the entire organization to become part of the organization’s strategic agenda. Decentralized decision structures provide a setting for participation, where committees have a degree of authority that allows them to take strategic issues under consideration, thereby influencing the organization’s strategic outcome.

Studies have investigated strategies as the influence of middle managers in terms of selling issues to top management teams (Dutton et al., 2001) or by exploring the upward and downward influence of middle managers (Floyd & Wooldridge, 1996). Further scholars have especially focused on how strategic initiatives are integrated at the lower, middle, and top management level (Barnett & Burgelman, 1996; Noda & Bower, 1996). These studies follow the process oriented line of strategic management research and provide rich insight into strategy processes forming across managerial levels. However, they do not explicitly address strategy as a macro-level phenomenon that has its origin at the individual level. Providing insight into the multiple

levels of strategy formation in terms of how strategic issue considerations converge across levels is seen as of central importance for developing this area of research further.

The need to explore strategy as multi-level phenomenon is emphasized within the broader notion of the *emergence of strategy*. The emergence of strategy is addressed in behavioral strategy where scholars advocate linking macro- and micro-organizational perspectives on strategy (Powell et al., 2011). Viewing strategic outcomes as stemming from “individuals, groups, and organizations interacting in uncertain environments” (Powell et al., 2011, p. 1374), behavioral strategy scholars pays special attention to bridging the gap between individual cognition, collective behavior, and organizational strategy. By emphasizing the mechanisms, processes, and interactions at different levels of organizations, behavioral strategy scholars claim to scale individual cognition and collective behavior to organizational level outcomes (Levinthal, 2011; Powell et al., 2011). The emergence of strategy is also inherent in the microfoundations perspective which accentuates understanding strategy as a macro phenomenon that emerges through micro-level elements (Barney & Felin, 2013). Microfoundational scholars emphasize the need to incorporate micro origins in macro elements (Felin & Foss, 2005) and claim to connect micro-level insights about associative processes with more aggregate perspectives and evidence (Gavetti, 2012; Gavetti & Rivkin, 2007; Hitt et al., 2007). In this respect, Barney and Felin (2013) proclaim the notion of “emergence” as individual interactions that “can lead to surprising and unintended macro-level outcomes once an emergent interaction is worked out to the macro level” (Barney & Felin, 2013, p. 147).

By acknowledging that organizational phenomena unfold within complex and dynamic social systems, strategy scholars increasingly claim the need for a multilevel approach, seeking to explore the multiple consequences of strategic behavior traversing levels of social organizations (Hitt et al., 2007). The central assumption is that many outcomes of interest result from a confluence of influences emanating from different levels of analysis (Rousseau, 1985).

For generating a more complex understanding of strategy, a multilevel approach allows one to explore how organizational phenomena emerge bottom-up, whereby dynamic interaction processes among lower level entities yield phenomena that manifest at higher, collective levels (Kozlowski, Chao, Grand, Braun, & Kuljanin, 2013; Kozlowski & Klein, 2000).

Overall, scholars have taken different angles regarding the emergence of strategy (Gavetti, 2012; Levinthal, 2011; Powell et al., 2011). What aligns them, however, is the claim for exploring the multi-level dynamics of strategy as pivotal to advance our understanding of strategy. Based upon these claims, we assume that individuals' strategic issues considerations coalesce into group considerations, to be finally manifested at the organizational level. In complex, decentralized organizations, strategies form from individuals nested within strategy teams that are in turn nested within committees representing the entire organization (Kozlowski & Klein, 2000). Individuals' strategic issue considerations inform the considerations of collectives such as groups, departments, functional areas, or strategic business units. These groups are interdependent based on a hierarchical structuring, interact on a face-to-face basis, and consist of a leader. Their collective considerations, in turn, coalesce into executive committees representing the entire organization, in which issues are considered in light of the whole corporation to be finally manifested at the organizational strategic agenda.

To address the research question of *how and why do attentional mechanisms shape strategy formation across levels,* we draw on strategic formation research in which strategy has been conceptualized as patterns forming through the actions and interactions of individuals and collectives (Burgelman, 1983; Mintzberg & Waters, 1985). Further, the attention-based theory views strategy as emerging from patterns of organizational attention, thereby putting emphasis on the attentional mechanisms of strategy formation (Ocasio, 1997; Ocasio & Joseph, 2006). Both perspectives serve as a foundation for a comprehensive view of strategy formation.

THEORETICAL BACKGROUND

Strategy Formation Research

Individual strategic issue consideration: Strategic issues are typically those that have high stakes and are of critical importance to an organization's success, especially in the long term (Ireland & Miller, 2004). Since they involve a large number of different variables, depict a high degree of connectivity among the elements of the problem, and are constituted by a dynamic component, strategic issues are complex and ill-structured (Baer et al., 2013; Lyles, 1981). According to Dutton and Dukerich (1991), strategic issues can be defined as "…events, developments, and trends that an organization's members collectively recognize as having some consequence to the organization" (Dutton & Dukerich, 1991, p. 518).

However, not all strategic issues can be taken into consideration. Consequently, organizational actors are understood as issue jugglers, thereby assigning issues with a level of importance and priority (Dutton & Dukerich, 1991). Empirical studies reveal that individual decision makers bring special skills and other resources to strategy making. Differences in experience, socialization, motivation, and self-interest impact an individual's considerations of strategic issues and constitute diverse preferences of the decision makers towards a formal strategy. Dutton et al. (2001) found that a strategist's resources in the form of strategic knowledge, expertise, and experience affect considerations of strategic issues as threat or opportunity, and in turn, the strategic activities of strategy teams.

Collective strategic issue consideration: Multifaceted and difficult-to-define strategic issues are viewed as requiring the formation of teams, in which members with high expertise and experience assemble broadly dispersed information and knowledge sets (Baer et al., 2013; Fern, Cardinal, & O'Neill, 2012; Mason & Mitroff, 1981). Hence, strategy scholars increasingly identify teams of individuals involved in making important strategic decisions as crucial to successful strategy formation (Baer et al., 2013). Strategy teams engage into issue consideration

by exchanging information and the implications of facts or the proper course of action. The generation of a high number of alternative, relevant problem formulations allow for the discovery of the root causes of a problem and of more valuable solutions. In their empirical study, Baer et al. (2013) show that a high set of problem-relevant information that is held in common by the team members lead to more comprehensive problem formulation.

Similarly, Dutton and Duncan (1987) emphasize that teams, through more deliberative analysis and interaction, develop a more nuanced view of strategic issues. The active and deliberate diagnosis of issues involves a high degree of information search and analysis, resulting into the effortful specification of strategic issues' characteristics and possible alternatives (Dutton & Duncan, 1987; Dutton, Fahey, & Narayanan, 1983; Dutton & Jackson, 1987). Teams with members having a high level of experience engage in more active diagnosing of strategic issues as their high set of problem-relevant information constitutes the awareness and comprehension of causal relationships, alternatives, and the means to successfully carry out a response (Ginsberg & Venkatraman, 2016; Milliken, 1990). The teams' strategic issue understanding has been characterized as data-driven, attentive, and reflective, enabling team members to intentionally and consciously assess an extensive amount of information in a relatively complex fashion (Dutton, 1997). Consequently, teams engaging into the deliberate diagnosis of strategic issues provide potential for a more complete understanding of the many facets of a strategic issue and for deriving more comprehensive solutions.

Organizational strategic issue consideration: At the organizational level, studies focus on resource allocation and indicate that issues considerations need to come together with providing resources to those strategic issues that are considered as relevant and viable (Barnett & Burgelman, 1996; Noda & Bower, 1996). These strategic issues finally make up the organization's strategic agenda. The literature on strategic agenda building seeks to explore how organizational actors identify and diagnose strategic options and how selected options

make the organization's strategic agenda (Dutton et al., 1983; Dutton, 1986; Dutton & Jackson, 1987). A strategic agenda entails the set of selected and prioritized strategic issues that in turn, guides the implementation of strategic change (Dutton, 1997). Scholars have contributed to understanding how organizations attend to key challenges and respond to them by adding, abandoning, or altering strategic issues, thereby building a comprehensive strategic agenda (Bansal, 2003; Sharma, 2000). Identifying and selecting viable strategic options is considered necessary for building a broad and comprehensive strategic agenda, and subsequently, for strategy formation and, in turn, implementation (Dutton & Dukerich, 1991).

As outlined above, well-known research programs in which strategy has been conceptualized as patterns forming through the actions and interactions of individuals and collectives have provided a rich empirical state of the art with regard to strategy formation process. Research in strategic issue consideration investigates the influence of the strategist's resources at the individual level (Dutton et al., 2001), pays attention to the interaction processes at the collective level (Baer et al., 2013), and explores the role of top management in integrating and building the strategic agenda at the organizational level (Barnett & Burgelman, 1996; Dutton & Penner, 1993). While the literature provides rich insight into issue considerations within each of these levels, it does not explicitly address how these issue considerations are integrated across levels to be finally manifested at the strategic agenda. The majority of studies provide only partial perspectives of the strategy formation process and we know little about the emergence of strategy across levels. More critically, by focusing on the micro-contexts of strategy, an increasing emphasis is put on attentional processes, assuming that attentional mechanisms affect the formation of strategy across levels (Baer et al., 2013). However, only few studies have systematically explored how strategy forms across levels and have provided first empirical insights into the underlying *mechanisms* that shape the emergence of strategy. We draw on the attention-based view to do so, which will be considered in the next section.

Attention-Based View

According to Ocasio (2011), the attention-based view links individual information processing and behavior to the structural influences of organizations. Building on theory of ambiguity and choice, Ocasio (1997) proposes that decision making results from the limited attentional capacity of individuals as well as the influence of organizational structures on an individual's attention. Hence, organizations are understood as systems of situated attention in which the cognition and action of individuals derive from the specific organizational context and situations in which decision makers find themselves. Ocasio (1997) defines attention as "…the notion, encoding, interpreting, and focusing of time and effort by organizational decision-makers on both (a) issues […] and (b) answers" (Ocasio, 1997, p. 189). In his model of situated attention, the author assumes that through attentional processing, the inputs from the environment of decisions are transformed and regulated by the organization into a repertoire of issues and answers, and in turn, into a set of organizational moves (Ocasio, 1997; Ocasio, 2011). From an attention-based point of view, attentional processing is shaped by three principles that constitute a set of mechanisms:

Structural Distribution of Attention: This principle emphasizes that decision-makers find themselves in a particular context with this context representing how an organization "…distributes and controls the allocation of issues, answers, and decision-makers within specific firm activities, communications, and procedures (Ocasio, 1997, p. 191). Attention structures are primarily constituted by the structural position and the resources available as well as by the rules of the game. The organization's rules guide and constrain strategy formation by generating a set of values that order the legitimacy, importance, and relevance of issues and answers (Ocasio, 1997). Hence, decision makers' attention is affected by instructions, procedural factors or tasks that generate a set of decision premises and motivations for actions (Ocasio & Joseph, 2005). Structural positions serve to stabilize expectations, perceptions of the

environment, the range of alternatives considered, and decision rules and premises (Bouquet & Birkinshaw, 2008; Nigam & Ocasio, 2010). In this respect, attention structures govern the valuation and legitimization of the repertoire of issues and answers. They shape how decision makers identify new issues, generate new action alternatives, and provide new ways to make sense of issues, their causes, and consequences (Ocasio, 2011). In this view, attention structures lead to potential variation in established patterns of attention that in turn, shapes strategy formation.

Situated Attention: The principle of situated attention indicates that attention is guided by decision making channels through which information flows and by which people engage in dialogue (Nigam & Ocasio, 2010; Ocasio, 2011). From an attentional perspective, decision-makers' attention is situated in the firm's procedural and communication channels with these channels shaping the repertoire of issues and answers available in an organization (Ocasio, 2011). Channels include formal or informal decision-making channels such as board committee meetings, Executive committee meetings or operating committee meetings which are set up to induce organizational actors to action on a selected set of issues (Ocasio, 1997). It is through these networks of channels that organizational members communicate and make critical and discrete decisions that involve organizational resources. Ocasio and Joseph indicate coupling, in terms of the degree to which channels may be (de)coupled with one another and from corporate activity, as a driver for strategy formation. Tightly coupled channels support strategy formation by focusing the broad reservoir of ideas and initiatives to those that warrant further managerial attention, thereby fostering the selection of strategic issues that become enduring and manifested activities of the organization (Nigam & Ocasio, 2010; Ocasio & Joseph, 2005).

Focus of Attention: The principle of focus of attention represents decision makers as being selective regarding the issues and answers they attend to (Ocasio, 1997). Decision makers develop a frame of reference to evaluate strategies and resource allocation proposals pertaining

to the main lines of business of the organization. These attentional processes focus the energy, effort, and mindfulness of decision-makers on a limited set of issues and answers. From an attentional perspective, top executives vary their focus of attention depending on the situation, thereby concentrating energy and effort on a limited set of strategic issues and answers, while ignoring others (Ocasio, 1997). According to Ocasio and Joseph (2008), top executives' focus of attention in strategy formation act as feed-forward and feedback mechanisms. It implies that decision makers rollout corporate strategic initiatives, monitor the execution of those initiatives and guide the corporate level issues and initiatives organizational members attend to (Ocasio & Joseph, 2008) (Ocasio and Joseph, 2008: 275).

Strategy Formation Across Levels

In this paper, we seek to integrate the outlined theoretical perspectives.

First, based upon the literature of strategy formation, we propose that decision makers bring special *skills*, differences in *experience*, and other *resources* to develop strategies. In our empirical investigation we use these critical aspects as a tentative lens in order to gain an insight into the strategic issue consideration at the individual level and to explain how individuals, with their specific strategic issue understanding, engage into the issue considerations of collectives. Furthermore, the outlined literature sheds light on the strategic issue consideration at the collective level. Teams provide the possibility to interact, communicate, and deliberately negotiate strategic issues. An *active diagnosis* of strategic issues and a *deliberate analysis* can lead to more nuanced views of strategic issues and are seen as foundations for a comprehensive problem formulation. Again, we use these critical aspects as a tentative lens in order to gain insights into the strategic issue consideration at the collective level and to explain how collective issues considerations coalesce into organizational level considerations. Finally, studies point out the need to *integrate* the collective issue considerations at the organizational level to finally make up the strategic agenda. At the organizational level, strategic issues have

to be considered as viable and relevant for the entire organization. Therefore, strategic issues can be abandoned, altered, or added to finally build the strategic agenda.

Accordingly, in our study we investigate strategy formation emerging from these multiple levels. The literature on strategy formation specifically concentrates on actions and interactions within the individual, the collective, and the organizational level. While the aforementioned critical aspects can be used as a tentative lens in order to gain insight into the issue considerations within each of these levels, they fall short in addressing how these issue considerations are integrated across the levels. We know little about how strategy emerges across levels and it remains unclear what the underlying mechanisms that shape the strategy formation process might be.

Second, based on the attention-based theory, we propose that attentional mechanisms shape the strategy formation across these levels. Following the assumption that strategy emerges from patterns of organizational attention, the *structural distribution of attention* is viewed as a critical aspect that affects the process of strategy formation. Furthermore, *procedural and communication channels* guide the attention of decision makers and influence the emergence of strategy across levels. Finally, there is some evidence of the *key role of the board of executives* being selective regarding the issues and answers they to attend to. Consequently, we use these critical aspects as a tentative lens in order to understand the mechanisms that shape strategy formation across the levels.

METHOD

Nested, Longitudinal Single Case Study Approach

In our study, we seek to explore how strategy formation emerges across levels as well as to identify the attentional mechanisms that are key to its emergence. As outlined above, we conducted our empirical research on the basis of two theoretical sources. First, the strategy formation literature guided us in the investigation of issue considerations within different

organizational levels. A second guidepost was the attention-based theory, which provided us with a first impression of the underlying mechanisms of the emergence of strategy formation across different levels. Thus, both theoretical perspectives can shed light on the emergence of strategy, a phenomenon that still remains under theorized despite its importance.

Following the aim of capturing emergence as it occurs (Kozlowski et al., 2013), we applied an embedded, longitudinal, single case study approach in which emergence is directly captured in the observer's constructive interpretations and rich descriptions. For capturing bottom-up influences in terms of how phenomena at the lower level of analysis influence higher-level phenomena (Hitt et al., 2007; Kozlowski & Klein, 2000), a single case study is especially apt, since it provides insightful data at the individual, collective, and organizational level of a single case and provides rich accounts concerning how lower-level variables upwardly influence higher-level variables.

Further, we applied a nested case study approach (Gibbert et al., 2008). Instead of conducting multiple case studies of different organizations, we conducted and analyzed different cases within one organization, thereby acknowledging that organizational entities reside in arrangements (Hitt et al., 2007). This approach enables us to explore individuals which are nested in work groups, which in turn are nested in larger organizational units, which are nested in larger organizations. Therefore, a nested case study approach is an adequate research setting for investigating the emergence of strategy by exploring strategy formation at the individual, collective, and organizational level (Dutton, 1997; Mintzberg & Waters, 1985).

Finally, we conducted a longitudinal case study since scholars claim that emergent effects only manifest over longer periods (Kozlowski & Klein, 2000). In this respect, researching strategy formation with regard to the attentional mechanisms is temporally sensitive since the manifestation of the collective property takes time (Bedwell et al., 2012). More specifically, individual issue considerations must combine through interactions at the collective level and,

over longer time frames, will manifest at the organizational level (Kozlowski et al., 2013; Mathieu & Chen, 2011). Due to a sufficient exposure across time, a longitudinal case study approach offers accounts rich enough to provide insight into the attentional mechanisms undergirding emergence, thereby extending theory from rich data across multiple levels.

Rational for Case Study Selection

We became interested in this case because it featured significant insight into strategic formation and it gave us the opportunity to track the formation of strategy at multiple levels as it occurred. Public hospitals are particularly fruitful to study strategy formation for several reasons. First, due to dynamic environments, hospitals face major challenges in improving their cost effectiveness (e.g., Schreyögg, Tiemann, & Busse, 2006). Because of the social missions, the fact that ownership is shared (Fernandez & Rainey, 2006), and the enormous costs involved (Rashman, Withers, & Hartley, 2009), effective strategy making is highly challenging. Second, in hospitals, various members engage in the strategy objectives of improving performance with groups of physicians, nurses, or administrative managers involved in the making of strategy (Llewellyn, 2001). This study offers an opportunity to investigate how these organizations manage to meet strategic challenges. We had the opportunity to conduct strategy formation occurring at the individual, collective, and organizational level over two years, beginning with the inception of the strategic goals in 2012.

Research Setting: The Case: A German Public Hospital

The research site was a German public hospital group that served a region of about 1.2 million people in a defined geographical area and admitted more than 215,000 patients each year. The hospital group employed approximately 8,500 staff members across 12 sites and was owned by the region of the federal state. To increase the transition from the autonomous acting of each clinic to a more coordinated strategy making and support the overall strategic goal of increasing the revenues and reducing the costs, the board of executives established two kinds of

committees, namely the medical centers and the management committee. As compared to business units, eight medical centers were initiated around the medical departments of the clinics. In these medical centers, head physicians from the medical departments of each of the 12 clinics were appointed with one physician functioning as the managing director. The medical centers engaged into formulating a strategic position for the various medical departments since the physicians were supposed to be close to the medical services, medical technologies, and patients. The members of each of these medical centers met regularly to engage into topics concerning the hospital's medical strategy as well as to ease a strategic reorientation with respect to costs and services of their respective medical discipline. Specifically, the purpose of the medical centers was, on the one hand, to operationalize the strategic intent of the hospital group. "*In a joint cooperation the performance planning and the strategic orientation of each medical realm as well as the overall strategy of the hospital group is to be processed" (official strategic agenda).* On the other hand, the medical centers were requested to prepare: *"…decisions regarding medical themes, generating of strategies, or employee management themes as recommendations for the board of executives" (official strategic agenda).*

Besides the medical centers, a management committee was established, representing the organization as a whole. In this committee, physicians, nurses, and managing directors as well as administrative managers and members from the boards were represented. The committee was supposed to integrate and manifest the centers' activities throughout the organization, thereby integrating topics coming up from the medical centers into clinic's issues (see Figure 1).

Insert Figure 1 about here

Data Sources

When traversing levels of analysis, research must be carefully designed, thereby considering

the levels of theory, measurement, and analysis for the constructs included in the investigation (Kozlowski et al., 2013; Kozlowski & Klein, 2000). Multilevel scholars emphasize the problems of measurement in terms of being coherent so that the level of measurement refers to the level of the entities from which data are derived (Hitt et al., 2007; Rousseau, 1985). In our nested, longitudinal single case study design, we adhered to the measurement level by using different ways of data collection for each of the levels under investigation. Data collection included compiling written material and taking field notes as well as observing 26 meetings. Whenever possible, the meetings were typed word-by-word. This is of special importance as we seek to address both, the individual level as well as the collective level. Further, we conducted 12 semi-structured interviews, including the managing directors, administrative managers, members from the board of executives as well as with the managing directors of each of the eight medical centers. In those interviews, we partly referred to the individual level unit as well as to the collective level in other parts. Each of these questions was carefully formulated towards the level of interest. Here, the managing directors served as an expert informant for the medical centers as these directors have unique knowledge about those activities and have directly participated in each of the center meetings.

Data Analysis

We adopted a nested, single case study design to uncover strategy formation at the individual, collective, and organizational level and to achieve a detailed understanding of the mechanisms affecting the formation across levels. We approached the data analysis with two broader steps.

Within-Level Analysis

In order to develop a conceptual frame for how strategy formed (or was impeded) across levels, we started our analysis at *the individual level*. We draw upon interviews, our observations as well as documents to analyze the strategic issue understanding of the individuals. Here, the interviews provided the major parts from which we identified the level of expertise (years in

hospital), tenure (years in organization), and supplementary courses in economics or management. We coded these materials accordingly to identify a balanced or an imbalanced strategic issue understanding, the latter being coded either as the medical or the economical perspective being dominant.

At *the collective level*, we referred to the interviews, our observations, and documents for each medical center as well as on our organizational level data. We prepared eight detailed center narratives (Patton, 2002). Next, we coded these narratives and primary data for each medical center to note similarities and differences. Our analysis continued iteratively, moving between data, emerging patterns, and theory until relationships emerged (Eisenhardt, 1989). In this way, we analyzed the types of issues the medical centers engaged in as well as the extent to which the collective issue considerations were characterized by an "*active diagnosis*" of strategic problems and opportunities or as a "*passive reporting*" of day-to-day activities.

At the organizational level, we draw upon our observations of the committee as well as documents to identify the level of integration by which organizational issue considerations were characterized. In contrast to a mere "*replication*" of issues already negotiated in the medical centers, discussing and bundling topics at the hospital level as well as setting priorities and allocating resources were coded as "*integration*" of strategic issues at the organizational level.

In a final step, we analyzed those strategic issues that had been considered as relevant and viable and finally made up the *strategic agenda* in 2013. Compared to the strategic goals formulated in 2012, we categorized each of the 2013's strategic agenda issues according to if issues have been further operationalized, if they have been stated without further refinements or if they were not mentioned at all.

Cross-Level Analysis

In a second step, we turned to identify the attentional mechanisms that each linked strategy formation generated by individuals to those of the medical centers as well as to those of the

organization. More generally, mechanisms entail the repetitive, activated or routinized activities that positively or negatively affect how lower level variables are linked to higher level variables (Kozlowski & Klein, 2000). To identify the attentional mechanisms that drive the formation of strategy from the individual to the collective level as well as from the collective level to the organizational level, we carefully read through all the material to identify explicit references to such links in the data. Further, to ensure that these mechanisms drive the linkage between levels, we seek to compare the information available in different data sources derived from different levels. Hence, we engaged in looking at the same data through various analytical levels, entailing the individual, collective, and organization.

Following a strategy of reiteration, we went back and forth between the data and the theoretical constructs regarding our literature base. Throughout the data analysis, we met regularly to exchange notes and to discuss and refine the emerging conceptual frame. Our methods were consistent with recommendations to establish the rigor of case study research, namely internal validity, construct validity, external validity, and reliability (Eisenhardt, 1989; Gibbert et al., 2008; Yin, 2014). During data analysis, we applied plausible causal arguments to our data, thereby demonstrating that our conclusions were based upon logical reasoning (Yin, 2014). Further, we triangulated by collecting data from multiple sources, we provided extensive quotes from the data, and we used multiple investigators to collect and analyze data. Finally, for ensuring replication (Leonard-Barton, 1990), we carefully documented and clarified our research procedures and established a clear chain of evidence, thereby allowing readers to reconstruct how we went from our initial research questions to the final conclusions (Yin, 2014).

FINDINGS

We used an in-depth analysis to elaborate a conceptual frame of strategy formation indicating how strategic issue considerations emerged across levels as well as how strategy was shaped

by three attentional mechanisms that undergird issue consideration. Firstly, we now present the outcome of our analysis regarding how strategy formed within the collective and organizational level in this study (see Table 1). In a second step, we then demonstrate the three attentional mechanisms that shaped strategy formation across levels.

The first two columns of the following table illustrate the issue consideration at the collective level. On the one hand, the discussed issues are tracked and the frequency of appearance is visualized by the numbers in brackets. On the other hand, the different forms of collective issue considerations are illustrated, ranging from a deliberate diagnoses of relevant issues to a passive reporting. The next two columns demonstrate the issue consideration at the organizational level. Again, the discussed issues are tracked and the different forms of organizational issue considerations are visualized (here: replication and integration). Finally, the last two columns illustrate the manifestation at the strategic agenda. The discussed issues included and disregarded in the strategic agenda are visualized. Furthermore, it is demonstrated how these issues became realized.

Insert Table 1 about here

Individual Strategic Issue Understanding

When establishing the eight medical centers, a physician was assigned to head each of the centers. Those managing directors of the medical centers were appointed by the board of executives and had been long standing members of the hospital. The data analysis revealed that the strategic understanding of the majority of managing directors was characterized by medical challenges and opportunities being balanced with economic goals and demands.

Specifically, the data reveal that the managing directors each have a long tenure in the hospital and have accumulated a high level of expertise in their medical profession, especially with regard to patients, quality of care, and services. The managing directors also noted that

they have passed additional management courses, such as in the area of medical hospital management or have been working as health care management consultants.

During the interviews, it became apparent that the majority of the managing directors rely upon a balanced strategic issue understanding from which they complement their initial medical representations with economic needs and demands. Some of the head physicians emphasized their role as physicians as the primary task and core representations of their profession and stated: *"We are surgeons, we don't think in terms of contracts" (B2).* However, instead of only focusing on quality and patient care, the managing directors emphasized a strategic understanding representing a balance between medical needs and economic demands. With regard to a balanced strategic issue understanding, two of our interviewees stated: "*The challenge is to combine cost reductions with changes and enhancements in the quality of patient care*" *(A5)*. And: *"I do not see any conflicts. The quality of the work is dominant. However, a certain economic pressure is necessary for the quality" (A6).*With regard to a balanced strategic issue understanding that the managing directors brought into their considerations, our data reveal that the head physicians reflected their medical centers from both, medical quality and economic constraints

Collective Issue Consideration

Within the medical centers, the head physicians such as the surgeons, gynecologists, urologists as well as the cardiologists regularly came together in order to consider medical-strategic issues from their professional stance. These meetings had fixed dates and the invited physicians met in the administrative office of the hospital. Within the meetings of the eight medical centers, it became apparent that the team members engaged into different forms of issues consideration, ranging from a deliberate diagnoses of relevant issues to a passive reporting.

More specifically, our data shows that some medical centers engaged into actively diagnosing and evaluating certain strategic issues. This was especially apparent with regard to

issues such as the use of a new medical robot or the implementation of an OP-Management system, the latter relates to the optimization of the incision-suture time in relation to the overall operative duration. Here, the center members capitalized on their expertise and strategic understanding and engaged into an active and deliberate diagnosis of these issues. The members searched for and exchanged information, depicted an analysis of the market as well as indicated the causal relationships, possible alternatives, and the means to successfully carry out the advantages of buying a new robot. This actively diagnosing of strategic issues is especially evident in the following quote:

> *J4: "I have worked at different sites with the medical robot. If we share capacities and costs and establish a new interdisciplinary center, the project is realizable."*
> *X1: "You are right, they had four surgeons who were able to handle the robot. But you need at least 250 cases to be profitable. This investment makes sense only if there is an increase of 1000 case mix points."*
> *J1: "We would need more patients from out of the city, otherwise we wouldn't grow. There is a tough competition in the city."*
> *X1: "We would have to be that good, taking away the patients from the other hospitals*
> *J1: In the hospital of my colleague in XY, they made it."*
> *X1: "Let's imagine another scenario. What would happen, if we do not invest in the robot right now? Will the patients move to another hospital?"*

In this case, the centers' members referred to both, their high medical expertise and their economic understanding, thereby allowing a discussion to unfold which was deliberate, analytical, and salient. However, our data demonstrate that most meetings of the eight medical centers were characterized by passive reporting. Given the high amount of day to day problems inherent in their hospitals, most of the time the members indicated a scarcity of beds, pregnancy of female physicians, or the high level of absenteeism and fluctuation they experience in their hospitals. Passive reporting was especially evident in the beginning of each meeting when the center members received a data sheet visualizing the actual performance measures of their hospital. While data allowed a comparison of the performance levels between the centers and

to discuss symptoms of differences, the data sheets were not used for actively diagnosing the centers' strategic needs and challenges. The tendency towards passive reporting as compared to an active, deliberate diagnosis of strategic issues is evident in the following dialogue:

X1: "The number of cases was always below target."
X2: "These months are always a relative lull, but you can see that we rise significantly over the planned budget since October."
X1: "There is also an extreme difference between October and November."
X1: "It does not help. It is problematic. X2: True, there is still a problem."

Overall, the center meetings are characterized by exchanging day-to-day-problems where members of certain medical centers describe and indicate the shortcomings and challenges they actually face in their responsibility as head physicians in their hospitals. Those themes included quality standards in cardiology, operation procedures, or treatment of patient procedures. Consequently, most of the center meetings revolved around members reporting performance developments, number of cases treated, occupancy rates and case mix points, without any means regarding exploring the causality of problems, identifying alternatives or generating solutions for the problem. With regard to a lack in actively diagnosing issues, one interviewee described the meetings of the medical centers as follows: *"... in our meetings, everything only revolved around money-issues and how to save it. We lacked in developing ideas and strategic ways. However, and this is my strong belief, this is why we are here. We need to take economic aspects into account, but similarly need to make good decisions about where to go in future" (I4).*

As can be seen in Table 1, the ratio of passive reporting and active diagnosis is 16:11. Obviously, the medical center meetings revolved around reporting current challenges and describing day-to-day problems and shortcoming while the active diagnosis of issues with regard to their strategic relevance and positioning was only rarely addressed.

Organizational Issue Consideration

Strategic issues considered at the medical center level need to be manifested and structurally integrated within the larger organization. For manifesting those issue considerations at the organizational level, the board of executives had established a committee, namely the management committee. In contrast to integrating collective level issues to organizational ones, our analysis revealed that integrating collective level properties at the organizational level fell short.

With regard to the organizational level committee, our data indicates a broad set of strategic issues which came onto consideration in the management committee. After issues were elaborated in the medical centers, the members of the management committee engaged into deepening and integrating these issues on an organizational level. Topics such as the need to implement an OP-Management, were bundled across each of the centers and considered in light of the entire organization: *"Unfortunately we have over all the centers, regarding the op-organization a utilization rate of 50%. Across Germany the utilization is 60% which means we have too much op capacity in our company which we do not use" (A6).* Another strategic issue that was accepted as relevant for the entire hospital group and successfully transformed from the collective level to the organizational level was the nutritional management. It concerns the implementation of standards for the detection and the medical care of undernourished patients and found broader support among the management committee: "*The third topic is the nutritional management. It works out well in the DRG-system and we have made profit of 150,000 Euro. That's why we initiated a workgroup in order to create standards and to promote the company-wide implementation" (E14).*

While the management committee engaged into considering certain strategic issues in terms of the hospital as a whole, however, our data shows that most committee meetings were dominated by the managing directors exchanging the economic developments of their centers.

As can be seen in Table 1, the ratio of replication and integration is 16:11. More specifically, discussions remained on a center level and topics already debated in the medical centers were simply replicated. This replication is evident in members stating during the meetings: *"We are going to reach our planned goal because we already had a high proficiency in January 2013 with a 5-10% retention period index. The results are no yet in the system" (F2). Other members replied: „In our medical center, we have successfully implemented some projects. We now have standardized procedures, a unified documentation of cases as well as a documentation of endoscopy" (E14).*

Strategic Agenda

The strategic agenda entails the codified and explicitly mentioned strategy issues that entail the medical-strategy of the hospital group itself. The building of the strategic agenda aimed at refining and operationalizing the strategic issues which had been formulated as strategic goals in 2012. Our data analysis revealed that considering and formulating strategic issues across the different collective and organizational committees led to an agenda which encompasses five topics.

While three of these topics (standards, nutritional management, and diabetic foot center) were operationalized on the agenda, one issue (op-management) was newly integrated and one issue (employee pool) was set up without any further refinement. Specifically, the issue considerations of both, the operationalized issues and the newly integrated issue, were characterized by an active diagnosis at the collective level and an integration at the organizational level. Furthermore, our data analysis reveals that eleven themes that had been discussed either in the medial centers or the management committee have not been included in the strategic agenda, while five themes disappeared when compared to the strategic goals formulated in 2012. In contrast to the previously described strategic issues, these issue

considerations were mainly characterized by a passive reporting style at the collective level and a replication reporting style at the organizational level.

Overall, our findings indicate that strategic issues which are deepened, critically analyzed, and integrated are more likely to be included in the strategic agenda.

Attentional Mechanisms

To further explore how the hospitals' strategic issues formed across different levels to finally make up the strategic agenda, we engaged into a second step of analysis. After exploring the considerations of strategic issues within the medical centers as well as the organization wide committee, we now present the attentional mechanisms that shape how and why strategic issues were considered across the levels. In the following, we present the attentional mechanisms of rules, channeling and articulation as well as the level at which they shape strategy formation (see Figure 2).

Insert Figure 2 about here

Rules as Attentional Mechanisms Shaping Individual to Collective Issue Consideration

At the medical center level, members engaged primarily in the reporting of day-to-day problems, thereby lacking the detection of the causal relationships of issues as well as means for solving them. Consequently, most of the centers were trapped in problem reporting and failed any deeper diagnosis of strategic issues. With regard to issue considerations at the level of the medical centers our analysis reveals that a lack of specified rules constitutes an attentional mechanism that inhibited the active diagnosis of strategic issues in each of the centers.

More specifically, our data shows that the instructions regarding the role each managing director of the center had to fulfill was unclear. When being assigned to lead the medical center, the physicians stated that they did not receive clear instructions with regard to the roles that a managing director of a center has to fulfill. The managing directors were assigned by one of the

board of executives, without receiving transparent task descriptions. As the following quote from a physician indicates, the managing directors expected that they had been appointed in order to generate a contribution to the medical-strategic positioning of their medical units: *“The initial idea […] of the medical center was announced with the word “managing director” as the managing director of the center, initially it was meant different, with clearly more steering influence…” (A6).*

Unclear rules were also apparent in the fact that the managing directors did not receive any resources, meaning no additional budget or additional personnel for the conduct of the themes elaborated in the medical centers. This lack of resources constituted a paradox in leadership in terms of assigning single members with a leadership role while not providing them with the responsibility for additional resources. This was commented by a physician as follows: *“The centers have, according to the rules of procedure, only an advisory function. They have no resources and no personnel” (D7).*

Furthermore, our interviewees revealed that the medical centers were mostly understood as having an advisory function with regard to strategy formation due to the centers’ tasks not being fully specified. The effects of this lack in specified rules, instructions, and tasks were explained by several interviewees stating that they felt insecure regarding the purpose of the meetings. More specifically, the physicians expected that they were supposed to brainstorm medical strategic themes that were likely to contribute to the overall performance of the organization. However, there was no rule whether a theme discussed in the medical center was worth to pursue. In one interview, a physician commented on the fact that there was no final evaluation regarding the quality of themes as follows: *“What are our achievements and failures, which quality standards do we hold and how do we orientate at a common goal, which we set” (C10).*

Furthermore, the attentional mechanism of unclear rules impeded the thoughtful diagnosis of themes. During our observations of the meetings, we hardly observed any attempts of the managing directors to focus the centers' attention on an active diagnosis of issues. Granted, the directors of the medical center were supposed to be heading those meetings. However, given unclear rules, the managing directors did not intervene and did not influence the course of action. Instead of pointing toward issues being more actively analyzed, the directors acted more or less as passive coordinators of the center meetings. *"My job is more of a structural nature. I care for the meeting taking place, the agenda, and I collect the themes" (A6).* The managing directors having a title, but no responsibility led to cynical statements such as: *"... the name managing director is actually a scorn. There is nothing to direct…A managing director should, in my opinion, be someone who is disposing resources, who directs, and has some influence. Actually, we are advisors" (F2).*

Overall, unclear rules provide the attentional mechanism that affected the actions and interactions taking part within the medical centers. Given those unclear instructions, procedural factors, and tasks, the data illustrates that a lack of specified rules inhibited the active diagnosis of strategic issues in each of the medical centers.

Channeling as Attentional Mechanism Shaping Collective to Organizational Consideration

Further, our data analysis demonstrates that a lack of integrating strategic issues at the level of the management committee was impeded by an attentional mechanisms, namely channeling. The data indicates a low degree of coupling of the committees, thereby hindering that issues debated in a particular channel are associated with issues considered in other channels.

Our study demonstrates that a lack in channeling impeded the structural integration and manifestation of the problems formulated. After having various issues discussed in the centers, it remained vague as to which committee has the responsibility with regard to the pursuit of these themes. More specifically, our interviewees stated that there was a lack of procedures

concerning how to proceed with issues beyond the center structures. Whatever results the medical centers revealed, it was unclear in which direction these issues should be passed on to the organization wide committees. These unclear communication paths are especially apparent in the following quote: *"But there are no strict formal rules: what is the task of the board of directors, what is the task of the centers? Should the board of directors decide and execute the decision or should the centers be involved? Such a clear structure does not exist. It could be clearer" (E14).*

With regard to the tasks that the medical centers need to achieve, a further physician stated: *"And goal attainment. This should be a task of the centers. To provide the medical orientation of what is not successful in our organization- in our organization with this specific organizational structure" (C10).*

From medical center to medical center we observed different ways for how issues were passed throughout the hospital. On the one hand, the medical centers passed on their issues to the organizational level management committee. Besides this committee, however, some issues were also passed along the established governance channels toward to the board of executives or to the hospital directors. Participants complained that it was not transparent which committee has the responsibility for the issues. The fact that issues were randomly transferred across committees and that there was no clear channeling of issues was commented on by a physician as follows:

"The structure of the centers is extraordinarily important, as the horizontal coordination complements the vertical structure. Such, the problem is that competence and responsibility has to be clarified" (C10).

Overall, channeling issues across the set of committees was mostly influenced by the members' expectations about the success of the initiatives. Issues needing smaller investments were directed the hospital directors, while bigger investment issues were passed to the board of

executives. As such, there was no clear procedure as to which kind of issue formulation had to be passed on to which channel. This unclear communication path between the committees enhanced a high replication of themes, as one interviewee stated: *"When referring to this management committee, it doesn't make sense if we exchange the same themes over and over again. Besides information, we should instead talk about strategic themes in general. We do not have to deal with topic about the development of the centers" (X1).*

Articulation as Attentional Mechanisms Shaping Organizational Issue Consideration

Finally, our study indicates that the attentional mechanism of a lack in articulation impeded the building of the agenda. Our data analysis reveals that articulation constitutes a top down control mechanism through which strategic issues are rolled out and the execution is monitored.

In particular, the interviewees stated that there was no clear articulation by the members of the board of executives regarding which issues are of relevance to the hospital itself as well as to the medical centers, thereby providing less guidance regarding the issue the organizational members focus their attention on. Strategic agenda building evolved in an unsystematic way with some issues making the agenda without any further operationalization. Further, issues have not been codified on the agenda, although they have been broadly discussed at the committees across levels. This lack of control of the strategic agenda from the top is especially apparent in the board of executives stating: *"We are way more distressed, way more then we already communicated. Yesterday, I did not make that so clear because the audience was bigger. All I can do is repeat what I have just said. We are distressed so we must think of something new together"(X2).*

Instead of focusing attention by providing a clear frame of reference, enabling to evaluate strategies and resource allocation, the board of executives treated the issues without deepening, operationalizing, and critically analyzing these themes. This lack in focus of intention is although evident in a statement by member of the board executives. When being asked about

future strategic goals of the hospital and how to reach them, the executive stated *„But all of this is not yet operationalized - I don't have a plan B tucked away at the back of my drawer"*, thereby lacking to provide guidance for agenda building.

DISCUSSION

The purpose of our study was to determine how and why strategy forms across levels such that a collective macrostructure manifests as well as to identify the attentional mechanisms that shape the strategy formation process. As strategy formation continues to evolve from interaction processes of individuals embedded in networks of channels, committees and special interest groups, studying the emergence of strategy is of central importance (Kozlowski et al., 2013).

In this paper we show that the strategy formation literature has contributed to understanding the dynamics by which individuals and collectives engage into issue considerations, thereby building a comprehensive strategic agenda. While this area of research emphasizes the dynamics that make up strategy formation at the individual level, the collective level, or the organizational level, the attention-based view provides insight into the attentional mechanisms that shape how strategies form across levels. In this view, attentional mechanisms shape the identification of issues and alternatives of individuals, whereas networks of channels enable strategic issues to be manifested and integrated at an organizational level. Thus, integrating both of these areas of research can shed light on how strategy forms from the individual, collective, and organizational level as well as on the attentional mechanisms affecting its formation.

Our conceptual frame assumes that individuals with their strategic issue understanding collectively engage into issue considerations. Here, strategy formation is characterized by seeking for information as well as by focusing the group's negotiations on those issues that the group is supposed to work on. However, our frame illustrates *rules* as an attentional mechanism

that affects the collective issue consideration. More specifically, our study indicates that unclear rules - in terms of ambiguous expectations that individuals have regarding the tasks as well as the roles they are supposed to fulfill - hinder a deliberate issue diagnosis at the collective level.

From an attentional perspective, organizational rules guide and constrain strategy formation by generating a set of values that order the legitimacy, importance, and relevance of issues and answers (Ocasio, 1997). Furthermore, by providing individuals with a concrete set of interests and identities, organizational rules have an impact on the individual's role understanding and influence the allocation of time and attention (Ocasio, 1997). Hence, strategy formation is affected by organizational instructions, procedural factors or tasks that generate a set of decision premises and motivations for actions (Nigam & Ocasio, 2010; Ocasio & Joseph, 2005). As such, our study indicates that organizational rules constitute an attentional mechanism that determines what issues decision makers attend to and what information actors notice and discuss with others. This finding supports prior work suggesting that instructions and tasks provide information about the incentive systems through which interpretations are made (Kaplan & Henderson, 2005) and determine how decision makers guide and animate organizational interpretations (Beck & Plowman, 2009). However, Rerup's study (2009) demonstrates that organizational rules can also limit attention to a narrow set of alternatives and make it more difficult to take notice of weak cues. These rules contain some criteria for selection and they serve to induce collective members to attend to certain issues, while ignoring others (Dutton et al., 2001). Similarly, our study also indicates that unclear rules constitute an attentional mechanism that affects the valuation and legitimization of the repertoire of issues and answers of individuals, thereby inhibiting collective issue considerations.

Moreover, our frame demonstrates that the manifestation of strategic issues at the organizational level is affected by the attentional mechanism of *channeling*. Specifically, a lack in channeling impedes the integration of strategic issues at the organizational level. From an

attention-based point of view, issue consideration is guided by decision making channels through which information flows and by which people engage in dialogue (Nigam & Ocasio, 2010). Based on the principle of 'situated attention', issue considerations are influenced by the particular context that the decision-makers are located in. Therefore, the characteristics of the procedural and communication channels significantly impact what decisions-makers focus on and how they focus their attention. Ocasio and Joseph (2008), for example, indicate coupling, in terms of the degree to which channels may be (de)coupled with one another and from corporate activity, as a driver for strategy formation. The authors found channels being disparate from each other and from corporate activities, with this loosely coupled network of channels leading to weaker overall alignment of corporate and business unit view of resource needs (Ocasio & Joseph, 2005). Members within tightly coupled channels, however, better interrelate their decision and actions with other organizational members and the deliberate analysis is characterized by more nuanced views of strategic issues (Dutton & Duncan, 1987).

At the organizational level, strategic issues need to be considered as relevant and viable, and they have to be integrated to finally make up the strategic agenda (Barnett & Burgelman, 1996; Noda & Bower, 1996). However, in our study, we revealed that strategic issues have not been integrated and bundled across the organization because of unclear pathways through which strategic themes had to be passed. The various committees responsible for strategy formation turned out as a loosely coupled network, without any clear channels for how to pass on certain issues from lower level to higher level committees. This finding supports the assumption that the focus of attention is triggered by characteristics of the situations (Ocasio, 1997). More specifically, the characteristics of the procedural and communication channels induce decision-makers to act on a selected set of issues and, in turn, they affect how strategic issues are considered. Hence, channeling in terms of how committees are coupled within the broader network of channels can be understood as an attentional mechanism affecting the integration of

issues at the organizational level.

Finally, our conceptual frame indicates collective issue consideration as informing how strategic issues are considered in organizational committees. More specifically, in our study, *articulation* provided the attentional mechanism that links organizational issue consideration to the manifestation of the strategic issues in the strategic agenda. Attention-based scholars indicate that strategy articulation constitutes a frame of reference, enabling one to evaluate strategies and resource allocation proposals pertaining to the main lines of business of the organization (Ocasio, 1997). More generally, we assume that articulation constitutes a top down control system through which strategic issues are rolled out and the execution is monitored, thereby guiding the issue the organizational members attend to (Ocasio & Joseph, 2006). Consequently, articulation provides a vehicle for top-down control of the corporate strategic agenda and constitutes a mechanism for linking corporate strategic issues and initiatives with those of the business units. Furthermore, strategic management scholars emphasize the key role of the top management in articulating formal statements that enunciate the strategic direction of the organization (Canales, 2015; Lavarda, Canet-Giner, & Peris-Bonet, 2010).

However, our study indicates that a lack in articulation inhibits one to control the strategic agenda building from the top. Without a clear articulation by the members of the board of executives regarding which issues are of relevance, strategic agenda building evolved in an unsystematic way. This finding supports prior work, suggesting that "…decision-makers will be selective in the issues and answers they attend to […] and what decision-makers do depends on what issues and answers they focus their attention on" (Ocasio, 1997, pp. 189–190).

Our findings corroborate the bottom-up perspective of strategy formation in which strategy is understood as a pattern forming from a stream of decisions and actions (Mintzberg, 1978; Mintzberg & Waters, 1985). Furthermore, they support the assumption that strategy formation can be conceptualized as a macro phenomenon that emerges through micro-level elements

(Barney & Felin, 2013; Foss & Lindenberg, 2013). Scholars emphasize the need to incorporate micro origins in macro elements and connect the micro-level insights with more aggregate perspectives and evidence (Gavetti, 2012; Hitt et al., 2007). However, the majority of studies provide only partial perspectives on the strategy formation process. We know little about the emergence of strategy across levels and the about the underlying mechanisms that shape the strategy formation process.

Our study extends the current understanding of strategies forming in a bottom-up way by providing insight into the underlying mechanisms that shape strategy formation across levels. Overall, our data reveal that rules, channelling, and articulation are identified as attentional mechanisms that shape the strategy formation process across levels. Specifically, our study indicates that a lack of specified rules inhibits the active diagnosis of strategic issues at the collective level. Further, the integration of strategic issues at the organizational level is hampered by unclear communication and procedural channels. Finally, a lack in articulation impedes the building of the strategic agenda. Hence, the issue considerations are mainly characterized by a passive reporting at the collective level and a replication at the organizational level. As a consequence, many strategic issues are discussed in the strategy formation process but finally not included in the strategic agenda. Several strategic issues even disappear when compared to the strategic goals formulated in 2012.

CONCLUSION AND CONTRIBUTION

In this paper we follow the claim for a better understanding of strategy as a multi-level phenomenon and seek to explore how strategy forms across levels. To do so, we integrate strategy formation research with the attention-based view in which strategy formation is viewed as attentional processing. As a result, our study demonstrates how strategy forms from the individual level, the collective level, and the organizational level to finally be manifested at the strategic agenda. In addition, our paper identifies three attentional mechanisms that affect the

formation of strategy across these levels. We present a conceptual frame and provide insight into how individual strategic issue understanding coalesce into the strategic issue diagnosis of groups as well as into organizational issue consideration and why unclear rules, a lack in channeling as well as a gap in strategy articulation hinder strategy formation.

The contributions of our paper are threefold. First, we contribute by integrating prominent research streams in strategy, namely strategy formation research and the attention-based view. In strategy formation most research provides a focus on a within level analysis, thereby generating insight into strategy formation at an individual, conceptual, or organizational level. In our paper, however, we conceptualize strategy as a multi-level phenomenon and provide insight into the formation of strategy across levels. Similarly, we identify the attentional mechanisms which shape issues considerations from the individual to the collective and the organizational level. By introducing our conceptual frame, we provide a more holistic representation of strategy formation, thereby minimizing the trend toward framework proliferation (Hutzschenreuter & Kleindienst, 2006). Second, this paper contributes to strategy formation literature by identifying attentional mechanisms in strategy formation. Although strategy research acknowledges attentional processes as determining why certain issues come under strategic consideration while others do not (Dutton et al., 2001), literature is scarce on the mechanisms that shape strategy formation across levels. By introducing the attentional mechanisms of rules, channeling, and articulation, we can provide a richer picture of how strategy emerges across levels and the underlying mechanisms shaping the emergence of strategy. Finally, our study refines and extends the attention-based view (Ocasio, 1997) by introducing decision makers' articulation, a concept that refines the attentional mechanism prevalent in the attention-based view.

However, the results of this study should be considered in light of its limitations. First, the number of cases indicates the restricted statistical generalizability of the findings. In case study

research theory is the foundation for selecting a case. This research follows the logic of analytical generalization and the empirical results are compared to the theory. Therefore, more empirical case studies are needed to enhance the knowledge about the emergence of strategy across levels. Second, our findings might be specific to the public sector. Future studies could systematically examine similarities and differences between the emergence of strategy in the public and private sector and thus clarify whether the relationships observed in this study hold in other contexts as well. Finally, a comprehensive case study, tracking how strategic issues emerge and disappear during the formation process, will allow scholars to elaborate and refine the proposed mechanisms that drive the formation of strategy across levels. For example, studies could investigate if the identified mechanisms differ between the formation of planned and emergent strategies.

Despite these limitations, we believe that the insights about the underlying mechanisms help to inform about the emergence of strategy in decentralized organizations. The study provides a more holistic picture of how strategies form from individuals nested within strategy teams that are in turn nested within committees representing the entire organization. However, this is a first conceptual frame that requires further empirical extension.

REFERENCES

Andersen, T. J. (2004). Integrating decentralized strategy making and strategic planning processes in dynamic environments. *Journal of Management Studies*, *41*(8), 1271–1299. doi:10.1111/j.1467-6486.2004.00475.x

Baer, M., Dirks, K. T., & Nickerson, J. A. (2013). Microfoundations of strategic problem formulation. *Strategic Management Journal*, *34*(2), 197–214. doi:10.1002/smj.2004

Bansal, P. (2003). From issues to actions: The importance of individual concerns and organizational values in responding to natural environmental issues. *Organization Science*, *14*(5), 510–527. doi:10.1287/orsc.14.5.510.16765

Barnett, W. P., & Burgelman, R. A. (1996). Evolutionary perspectives on strategy. *Strategic Management Journal*, *17*(S1), 5–19. doi:10.1002/smj.4250171003

Barney, J., & Felin, T. (2013). What are microfoundations? *Academy of Management Perspectives*, *27*(2), 138–155. doi:10.5465/amp.2012.0107

Beck, T. E., & Plowman, D. A. (2009). Experiencing rare and unusual events richly: The role of middle managers in animating and guiding organizational interpretation. *Organization Science*, *20*(5), 909–924. doi:10.1287/orsc.1090.0451

Bedwell, W. L., Wildman, J. L., DiazGranados, D., Salazar, M., Kramer, W. S., & Salas, E. (2012). Collaboration at work: An integrative multilevel conceptualization. *Human Resource Management Review*, *22*(2), 128–145. doi:10.1016/j.hrmr.2011.11.007

Bouquet, C., & Birkinshaw, J. (2008). Weight versus voice: How foreign subsidiaries gain attention from corporate headquarters. *Academy of Management Journal*, *51*(3), 577–601. doi:10.5465/amj.2008.32626039

Burgelman, R. A. (1983). A model of the interaction of strategic behavior, corporate context, and the concept of strategy. *Academy of Management Review*, *8*(1), 61–70. doi:10.5465/AMR.1983.4287661

Canales, J. I. (2015). Sources of selection in strategy making. *Journal of Management Studies*, *52*(1), 1–31. doi:10.1111/joms.12101

Dutton, J. E. (1997). Strategic agenda buidling in organizations. In Z. Shapira (Ed.), *Organizational decision making* (pp. 81–105). Cambridge: Cambridge University.

Dutton, J. E., & Penner, W. J. (1993). The importance of organizational identity for strategic agenda building. In J. Hendry, G. Johnson, & J. Newton (Eds.), *Strategic thinking: Leadership and the management of change* (pp. 89–113). John Wiley & Sons Ltd.

Dutton, J. E. (1986). Understanding strategic agenda building and its implications for managing change. *Scandinavian Journal of Management Studies*, *3*(1), 3–24. doi:10.1016/0281-7527(86)90008-3

Dutton, J. E., & Ashford, S. J. (1993). Selling issues to top management. *Academy of Management Review*, *18*(3), 397–428.

Dutton, J. E., Ashford, S. J., O'Neill, R. M., & Lawrence, K. A. (2001). Moves that matter: Issue selling and organizational change. *Academy of Management Journal*, *44*(4), 716–736.

Dutton, J. E., & Dukerich, J. M. (1991). Keeping an eye on the mirror: Image and identity in organizational adaptation. *Academy of Management Journal*, *34*(3), 517–554. doi:10.5465/256405

Dutton, J. E., & Duncan, R. B. (1987). The creation of momentum for change through the process of strategic issue diagnosis. *Strategic Management Journal*, *8*(3), 279–295. doi:10.1002/smj.4250080306

Dutton, J. E., Fahey, L., & Narayanan, V. K. (1983). Toward understanding strategic issue diagnosis. *Strategic Management Journal*, *4*(4), 307–323. doi:10.1002/smj.4250040403

Dutton, J. E., & Jackson, S. E. (1987). Categorizing strategic issues: Links to organizational action. *Academy of Management Review*, *12*(1), 76–90. doi:10.5465/amr.1987.4306483

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, *14*(4), 532–550.

Elbanna, S. (2006). Strategic decision-making: Process perspectives. *International Journal of Management Reviews*, *8*(1), 1–20.

Felin, T., & Foss, N. J. (2005). Strategic organization: A field in search of micro-foundations. *Strategic Organization*, *3*(4), 441–455. doi:10.1177/1476127005055796

Fern, M. J., Cardinal, L. B., & O'Neill, H. M. (2012). The genesis of strategy in new ventures: Escaping the constraints of founder and team knowledge. *Strategic Management Journal*, *33*(4), 427–447. doi:10.1002/smj.1944

Fernandez, S., & Rainey, H. G. (2006). Managing successful organizational change in the public sector. *Public Administration Review*, *66*(2), 168–176. doi:10.1111/j.1540-6210.2006.00570.x

Floyd, S. W., & Wooldridge, B. (1996). *The strategic middle manager: How to create and sustain competitive advantage*. San Francisco: Jossey-Bass Publishers.

Foss, N. J., & Lindenberg, S. (2013). Microfoundations for strategy: A goal-framing perspective on the drivers of value creation. *Academy of Management Perspectives*, *27*(2), 85–102. doi:10.5465/amp.2012.0103

Gavetti, G. (2012). Toward a behavioral theory of strategy. *Organization Science*, *23*(1), 267–285. doi:10.1287/orsc.1110.0644

Gavetti, G., & Rivkin, J. W. (2007). On the origin of strategy: Action and cognition over time. *Organization Science*, *18*(3), 420–439. doi:10.1287/orsc.1070.0282

Gibbert, M., Ruigrok, W., & Wicki, B. (2008). Research notes and commentaries what passes as a rigorous case study. *Strategic Management Journal*, *29*(13), 1465–1474.

Ginsberg, A., & Venkatraman, N. (2016). Institutional initiatives for technological change: From issue interpretation to strategic choice. *Organization Studies*, *16*(3), 425–448. doi:10.1177/017084069501600303

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*(6), 1385–1399. doi:10.5465/AMJ.2007.28166219

Hutzschenreuter, T., & Kleindienst, I. (2006). Strategy-process research: What have we learned and what is still to be explored. *Journal of Management*, *32*(5), 673–720. doi:10.1177/0149206306291485

Ireland, R. D., & Miller, C. C. (2004). Decision-making and firm success. *The Academy of Management Executive (1993-2005)*, *18*(4), 8–12.

Jarzabkowski, P., Balogun, J., & Seidl, D. (2007). Strategizing: The challenges of a practice perspective. *Human Relations*, *60*(1), 5–27.

Kaplan, S., & Henderson, R. (2005). Inertia and incentives: Bridging organizational economics and organizational theory. *Organization Science*, *16*(5), 509–521. doi:10.1287/orsc.1050.0154

Klein, K. J., & Kozlowski, S. W. J. (2000). From micro to meso: Critical steps in conceptualizing and conducting multilevel research. *Organizational Research Methods*, *3*(3), 211–236. doi:10.1177/109442810033001

Kozlowski, S. W. J., Chao, G. T., Grand, J. A., Braun, M. T., & Kuljanin, G. (2013). Advancing multilevel research design. *Organizational Research Methods*, *16*(4), 581–615. doi:10.1177/1094428113493119

Kozlowski, S. W. J., Gully, S. M., Nason, E. R., & Smith, E. M. (1999). Developing adaptive teams: A theory of compilation and performance across levels and time. In D. R. Ilgen & E. D. Pulakos (Eds.), *The changing nature of performance. Implications for staffing, motivation, and development* (pp. 240–292). San Francisco: Jossey-Bass Publishers.

Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations. Foundations, extensions, and new directions* (pp. 3–90). Jossey-Bass.

Langley, A., Mintzberg, H., Pitcher, P., Posada, E., & Saint-Macary, J. S. (1995). Opening up decision making: The view from the black stool. *Organization Science*, *6*(3), 260–279.

Lavarda, R. A. B., Canet-Giner, M. T., & Peris-Bonet, F. J. (2010). How middle managers contribute to strategy formation process: Connection of strategy processes and strategy practices. *Revista de Administração de Empresas*, *50*(4), 358–370.

Leonard-Barton, D. (1990). A dual methodology for case studies: Synergistic use of a longitudinal single site with replicated multiple sites. *Organization Science*, *1*(3), 248–266.

Levinthal, D. A. (2011). A behavioral approach to strategy—what's the alternative? *Strategic Management Journal*, *32*(13), 1517–1523.

Llewellyn, S. (2001). "Two-way windows": Clinicians as medical managers. *Organization Studies*, *22*(4), 593–623.

Lyles, M. A. (1981). Formulating strategic problems: Empirical analysis and model development. *Strategic Management Journal*, *2*(1), 61–75. doi:10.1002/smj.4250020106

Mason, R. O., & Mitroff, I. I. (1981). *Challenging strategic planning assumptions: Theory, cases and techniques*. New York: John Wiley & Sons.

Mathieu, J. E., & Chen, G. (2011). The etiology of the multilevel paradigm in management research. *Journal of Management*, *37*(2), 610–641. doi:10.1177/0149206310364663

Milliken, F. J. (1990). Perceiving and interpreting environmental change: An examination of college administrators' interpretation of changing demographics. *Academy of Management Journal*, *33*(1), 42–63. doi:10.5465/256351

Mintzberg, H. (1978). Patterns in strategy formation. *Management Science*, *24*(9), 934–948. doi:10.1287/mnsc.24.9.934

Mintzberg, H. (1994). *The rise and fall of strategic planning*. New York: The Free Press.

Mintzberg, H., & McHugh, A. (1985). Strategy formation in an adhocracy. *Administrative Science Quarterly*, *30*(2), 160–197. doi:10.2307/2393104

Mintzberg, H., & Waters, J. A. (1985). Of strategies, deliberate and emergent. *Strategic Management Journal*, *6*(3), 257–272. doi:10.1002/smj.4250060306

Nigam, A., & Ocasio, W. (2010). Event attention, environmental sensemaking, and change in institutional logics: An inductive analysis of the effects of public attention to Clinton's health care reform initiative. *Organization Science*, *21*(4), 823–841. doi:10.1287/orsc.1090.0490

Noda, T., & Bower, J. L. (1996). Strategy making as iterated processes of resource allocation. *Strategic Management Journal*, *17*(S1), 159–192.

Ocasio, W. (1997). Towards an attention-based view of the firm. *Strategic Management Journal*, *18*(S1), 187–206.

Ocasio, W., & Joseph, J. (2005). An attention-based theory of strategy formulation: Linking micro- and macroperspectives in strategy processes. In G. Szulanski, J. Porac, & Y. Doz (Eds.), *Advances in Strategic Management: Volume 22. Strategy process* (pp. 39–62). Oxford: Elsevier Ltd.

Ocasio, W. P. (2011). Attention to attention. *Organization Science*, *22*(5), 1286–1296. doi:10.1287/orsc.1100.0602

Ocasio, W. P., & Joseph, J. (2006). Governance channels and organizational design at General Electric: 1950-2001. In R. M. Burton, B. Eriksen, D. D. Hakonsson, & C. C. Snow (Eds.), *Information and Organization Design Series. Organization Design. Evolving the state of the art* (6th ed., pp. 267–284). Springer.

Ocasio, W., & Joseph, J. (2008). Rise and fall - or transformation?: The evolution of strategic planning at the General Electric Company, 1940–2006. *Long Range Planning*, *41*(3), 248–272. doi:10.1016/j.lrp.2008.02.010

Powell, T. C., Lovallo, D., & Fox, C. R. (2011). Behavioral strategy. *Strategic Management Journal*, *32*(13), 1369–1386. doi:10.1002/smj.968

Rashman, L., Withers, E., & Hartley, J. (2009). Organizational learning and knowledge in public service organizations: A systematic review of the literature. *International Journal of Management Reviews*, *11*(4), 463–494. doi:10.1111/j.1468-2370.2009.00257.x

Rerup, C. (2009). Attentional triangulation: Learning from unexpected rare crises. *Organization Science*, *20*(5), 876–893. doi:10.1287/orsc.1090.0467

Rousseau. (1985). Issues of level in organizational research: Multilevel and cross-level perspectives. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior. An annual series of analytical essays and critical reviews* (pp. 1–37). Greenwich, Conn.: JAI Press.

Schreyögg, J., Tiemann, O., & Busse, R. (2006). Cost accounting to determine prices: How well do prices reflect costs in the German DRG-system? *Health Care Management Science*, *9*(3), 269–279. doi:10.1007/s10729-006-9094-0

Sharma, S. (2000). Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy. *Academy of Management Journal*, *43*(4), 681–697. doi:10.5465/1556361

Yin, R. K. (2014). *Case study research: Design and methods*. Thousand Oaks: Sage Publications.

Table 1: Data Display - Collective Issue Consideration, Organizational Issue Consideration, and Strategic Agenda Building

Collective Issue Consideration		**Organizational Issue Consideration**		**Strategic Agenda Building**	
Passive Reporting (16)	**Active Diagnosis** (11)	**Replication** (16)	**Integration** (10)		
• Bed management (1) • Development of the medical center (8) • Interface problems (1) • Process optimization (1) • Marketing operations (1) • Coding (2)	• Referring physicians (1) • Expansion of the performance spectrum (3)	• Ward management (3) • Development of the medical center (8) • Emergency room (2) • Internal cooperations (1)	-	• Bed management • Development of the medical center • Interface problems • Process optimizing • Marketing operations • Coding • Referring physicians • Expansion of the performance spectrum • Ward management • Emergency room • Internal cooperations	**Not Mentioned**
• Expansion of the breast center (1)	• Purchase of a new medical robot (1) • Implementation of service packages (1) • Surgery cooperations(1)	• Establishment of medical centers (2)	-	• Expansion of the breast center • Purchase of a new medical robot • Implementation of service packages • Surgery cooperations	**Issue Disappearance**
• Employee pool (1)	-	-	• Employee pool (1)	• Employee pool	**Issue Statement**
-	• Standards (2) • Diabetic foot center (1)	-	• Standards (3) • Nutritional management (2) • Diabetic foot center (1)	• Standards • Nutritional management • Diabetic foot center	**Issue Operationalization**
-	• Op-management (1)	-	• Op-management (3)	• Op- management	**New Issue**

Figure 1: Organigram of Strategy Formation in a Public Hospital Group

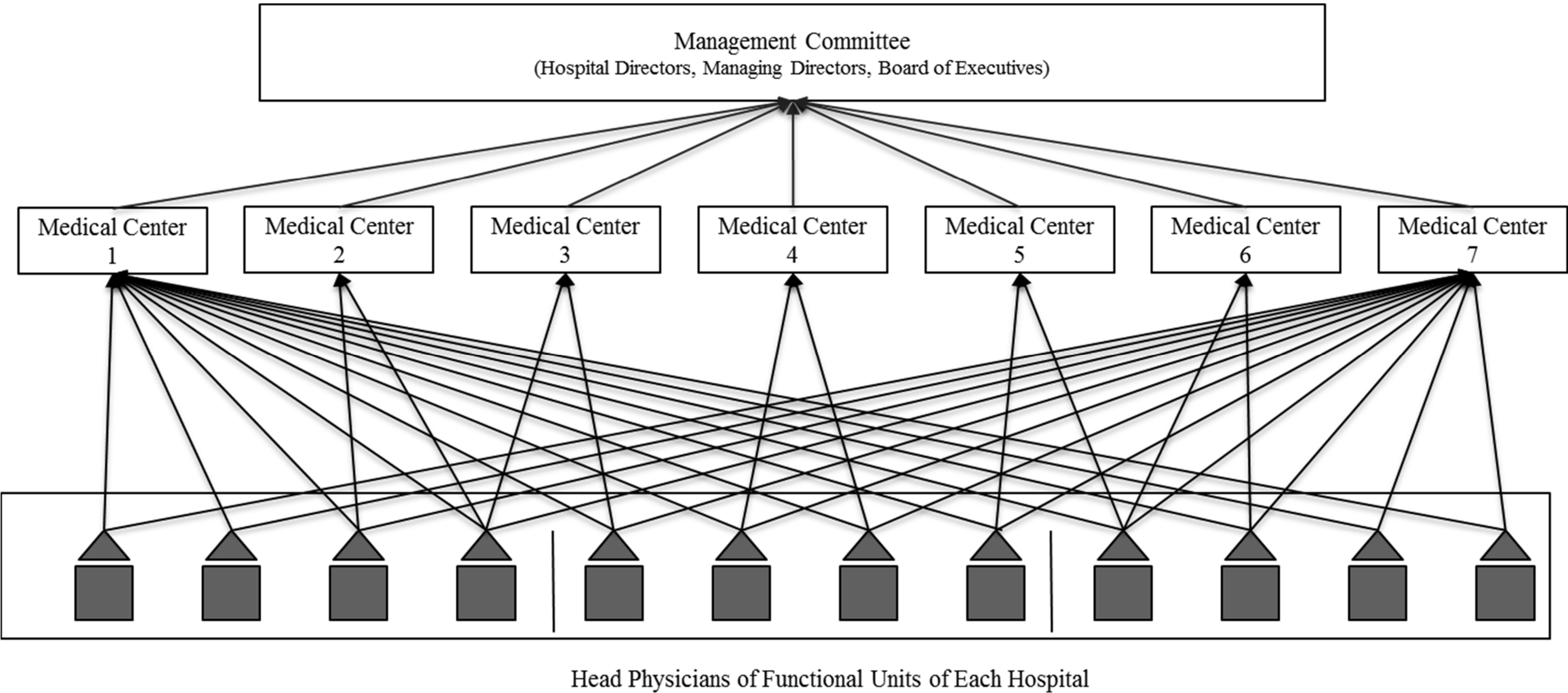
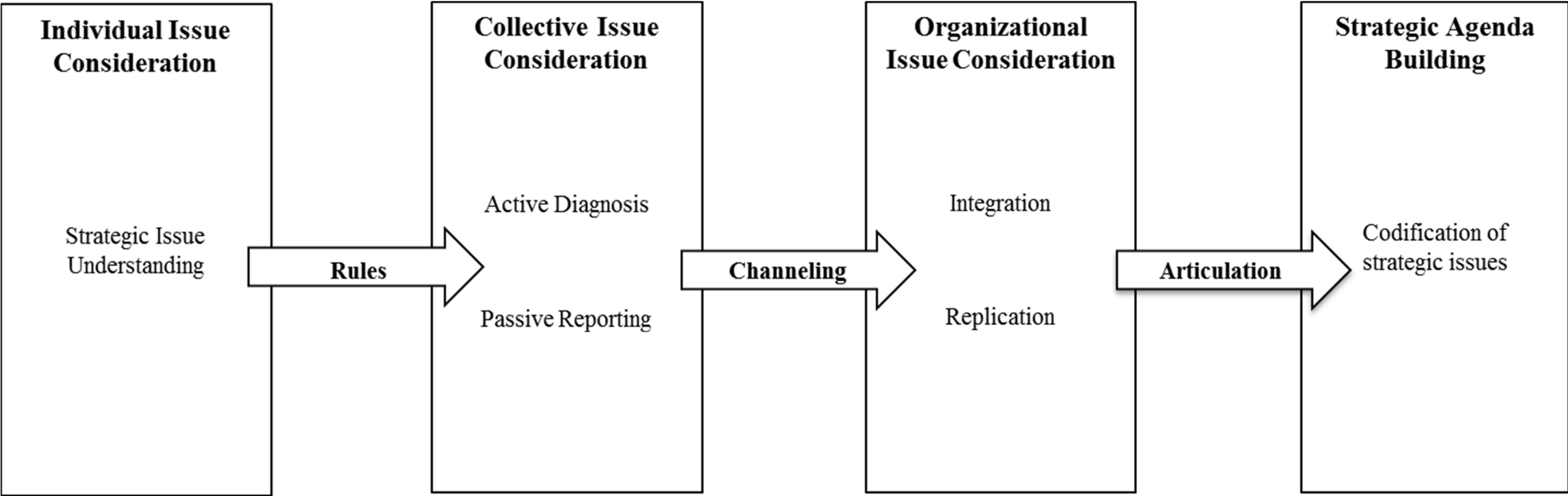


Figure 2: Conceptual Frame - Strategy Formation Across Levels



Paper 2

Processing of Intended and Unintended Strategic Issues and Integration into the Strategic Agenda

Ridder, H.-G.; Schrader, J. S.

Health Care Management Review

Published ahead of print, 2017

doi: 10.1097/HMR.0000000000000184

Copyright © 2017 Wolters Kluwer Health, Inc.

Based on the following previous versions:

Ridder, H.-G.; Schrader, J. S. (2016): Strategy Formation in Hospitals: Management of Intended and Unintended Strategic Issues in Hospitals. Paper presented at the 76th Annual Meeting of the Academy of Management, Anaheim, California, USA, August, 5th – 9th, 2016.

Ridder, H.-G.; Schrader, J. S. (2017): Strategy Formation in Hospitals: Management of Intended and Unintended Strategic Issues in Hospitals. Paper presented at the 21th International Research Society on Public Management Conference, Budapest, Hungary, April, 19th – 21th, 2017.

Processing of Intended and Unintended Strategic Issues
and Integration into the Strategic Agenda

ABSTRACT

Background: Strategic change is needed in hospitals due to external and internal pressures. However, research on strategic change, as a combination of management and medical expertise in hospitals, remains scarce.

Purpose: We analyze how intended strategic issues are processed into deliberate strategies and how unintended strategic issues are processed into emergent strategies in the management of strategy formation in hospitals. This study empirically investigates the integration of medical and management expertise in strategy formation.

Methodology: The longitudinal character of the case study enabled us to track patterns of intended and unintended strategic issues over 2 years. We triangulated data from interviews, observations, and documents. In accordance with the quality standards of qualitative research procedures, we analyzed the data by pattern matching and provided analytical generalization regarding strategy formation in hospitals.

Results: Our findings suggest that strategic issues are particularly successful within the strategy formation process if interest groups are concerned with the strategic issue, prospective profits are estimated, and relevant decisions makers are involved early on. Structure and interaction processes require clear criteria and transparent procedures for effective strategy formation.

Conclusion: There is systematic neglect of medical expertise in processes of generating strategies.

Practice Implications: Our study reveals that the decentralized structure of medical centers is an adequate template for both the operationalization of intended strategic issues and the development of unintended strategic issues. However, tasks, roles, responsibility, resources, and administrative support are necessary for effective management of strategy formation. Similarly, criteria, procedures, and decision making are prerequisites for effective strategy formation.

It is unsurprising that strategic change in hospitals stems, to a large extent, from external pressures, especially from government influence and regulations (Kerpershoek, Groenleer, & Bruijn, 2016; Kitchener, 1998; Ridder, Doege, & Martini, 2007), escalating costs, and increased competition (Al-Amin, Zinn, Rosko, & Aaronson, 2010). Furthermore, the privatization of hospitals is associated with an increase in efficiency due to decreased staffing ratios (Tiemann & Schreyoegg, 2012). These external pressures are often highlighted as initiators of strategic change in hospitals. However, strategic change in hospitals is rooted in internal obstacles as well. The literature reveals that hospitals often lack relevant strategic resources (professional IT structures, financial support, and trained staff) as necessary foundations of strategic change (Alexander, D'Aunno, & Succi, 1996; Harrison & Kimani, 2009). In addition, the literature is saturated with studies of how different professions, such as managers, physicians, and nurses, prevent the generation and implementation of a common strategy in hospitals (Buechner, Schreyoegg, & Schultz, 2014; Kitchener, 1998). Empirical evidence demonstrates that incompatibility between the professions' vocational culture leads to a lack of collaboration in strategy formation (Bate, 2000; Glouberman & Mintzberg, 2001). Based on these external and internal pressures, there is a need for strategic change in hospitals, but only a few studies have specifically investigated strategic change in hospitals (Harrison & Kimani, 2009; Kitchener, 1998). These studies mainly focus on antecedents and effects of strategic change and failures in transferring tools of strategy generation and implementation from industry to hospitals. However, there is little empirical evidence about the formation of strategies in hospitals. This study aims to address this gap by investigating into strategy formation as a combination of management and medical expertise. Authors emphasize the necessity to promote collaboration between managers and physicians for several reasons (Chreim & MacNaughton, 2016; Mintzberg, 1997; Mintzberg & Glouberman, 2001). On the one hand, managers are unable to obtain access to the expertise of the medical domain, and it is risky to conduct strategic change solely top down

from a strategic management perspective if such an attempt is not inspired and supported by professionals in the hospital (Solstad & Pettersen, 2010). On the other hand, medical professionals (especially physicians) feel more related to their professions and not to the hospital's strategy, but medical expertise is crucial for the integration of medical progress into the strategic agenda (Wells, Lee, McClure, Baronner, & Davis, 2004).

Theoretically, we conceptualize this collaboration by the well-known differentiation into intended and unintended strategies (Mintzberg, 1978). We assume that this differentiation is relevant for the aforementioned reasons. Intended strategies in hospitals stem from the board of director's strategic intents, considering competition, stakeholder influences, strategic options, missions, goals, and administrative procedures to conduct the strategic decisions. Unintended strategies stem from intense knowledge about the development of the medical realm, exchange within the medical profession, and experience regarding the conduct of medical work within the hospital. Hence, as the integration of intended and unintended strategic issues are of utmost importance, in this study we ask how intended strategic issues are processed into deliberate strategies and how unintended strategic issues are processed into emergent strategies and how these strategies are simultaneously coordinated and integrated in the management of strategy formation. We conduct an empirical study on how a hospital group uses a combination of medical and management expertise in processes of generating strategies. Based on these empirical findings, we develop a model of strategy formation in hospitals. The theoretical contribution lies in a better understanding of how intended strategic issues and unintended strategic issues are processed and integrated in hospitals. To the best of our knowledge, this is the first study that investigates the joint effort of medical expertise and management competence in the formation of hospital strategies.

THEORETICAL BACKGROUND

The theoretical roots of our work stem from Mintzberg's (1978) differentiation into intended and unintended strategic issues highlighting their role in becoming deliberate and emergent strategies. These conceptual foundations lead to different research streams. These streams investigate activities at particular hierarchical levels in the organization (Elbanna, 2006; Noda & Bower, 1996), the strategic role of middle managers (Pappas, Flaherty, & Wooldridge, 2004), pay attention to selling issues to top management (Dutton, Ashford, O'Neill, & Lawrence, 2001), explore the role of top management teams or strategy committees (Raes, Glunk, Heijltjes, & Roe, 2007), and attempt to understand the micro activities of various actors (Jarzabkowski, Balogun, & Seidl, 2007).

In these streams the *co-existence* of intended and unintended strategic issues is considered, but it remains questionable how intended and unintended strategic issues are simultaneously structured, coordinated, and integrated (Andersen, 2004; Canet-Giner, Fernández-Guerrero, & Peris-Ortiz, 2010; Elbanna, 2006; Grant, 2003; Lavarda, Canet-Giner, & Peris-Bonet, 2010). Overall, it is indicated that strategy formation is neither seen as the exclusive domain of top management with top down, centralized decision making nor is emergent and bottom up seen as the exclusive domain of front line and middle managers (Canales, 2015; Grant, 2003; Hutzschenreuter & Kleindienst, 2006). In essence, it is stated that effective strategy formation relies on a dynamic interaction between planning and emergence and the integration of deliberate and emergent strategy formation (Andersen, 2004). The challenge lies in balancing the co-existence of top management intents and the emergence of unintended strategies (Canales, 2015; Grant, 2003). Only a few studies provide insight into conceptual elements that effect the deliberate and emergent strategy formation.

Specifically, in the *intended part* of strategy formation an articulated strategic intent serves as a communication tool what the top management sees as the future position of the

organization. Based on the exploration of the competitive market and the analysis of strategic alternatives, missions and goals are developed and specified in detail. By articulating formal statements that enunciate the strategic direction of the organization, the key role of top management in setting the strategic intent for the organization is addressed (Canales, 2015; Mirabeau & Maguire, 2014). The literature indicates that strategic intent is often accompanied by top-down planning. This is interpreted as a useful mechanism for the structure of strategy formation. Structure is seen as an administrative arrangement "…altered by top management to influence the perceived interests of organizational members" (Mirabeau & Maguire, 2014, p. 1205). Such an administrative arrangement provides distinctive corporate guidelines, clear performance targets and the allocation of resources (Grant, 2003; Lovas & Ghoshal, 2000). Clear criteria should assure a common understanding for how to define and operationalize the intended strategic issue and enable coordinated actions across the organization (Andersen, 2004). A centralized structure might support the coordination of the strategy formation process but also influences the interaction between involved actors. Specifically, clearly defined communication channels, realized by pre-specified procedures, for example, regular meetings, standardized e-mail use, and/or workshops, affect the manner in and frequency with which actors communicate and play a significant role in shaping the strategy formation process (Huxham & Vangen, 2000). Overall, the structured collaboration of the involved actors seems to be central for effective strategy formation.

In *unintended* strategy formation strategy is seen as patterned actions that do not stem from top management's intention (Kim, Sting, & Loch, 2014; Mirabeau & Maguire, 2014). In contrast to intended strategic issues, unintended strategic issues are seen as autonomous bottom-up initiatives with a tendency to decentralized strategy making. Objectives are broadly defined driven by the creation of experimenting with alternative elements of strategy formation. Huxham & Vangen (2000) highlight the structure "… as a key driver of the way agendas are shaped

and implemented" (Huxham & Vangen, 2000, p. 1166). In the development of unintended strategic issues, a decentralized structure is seen as a facilitator of bottom-up strategy formation. Such an administrative arrangement enables a wide access to the agenda, but has consequences for the interaction processes in strategy formation. For bottom-up strategy formation, the participants need resources, the authority to act, and the administrative support to take part actively in the strategy formation process (Huxham & Vangen, 2000; Wells et al., 2004). Andersen (2004), for example, demonstrates that the emergence of unintended strategic issues is fostered by the extent to which actors hold the formal authority to put forward new strategic issues on their own. This so called "distributed decision authority" can have a positive effect on the economic performance in dynamic environments (Andersen, 2004, p. 1275). As a result, unintended strategic initiatives require communication channels and formal interaction procedures that guide the handling and proceeding of unintended strategic issues (Canet-Giner et al., 2010; Ocasio & Joseph, 2005).

In sum, stemming from the theoretical differentiation into unintended and intended strategic issues (Mintzberg, 1978), we inspected the literature on the coexistence of these strategic issues and their processing into deliberate and emergent strategies and identified central conceptual elements. Although this literature is not concerned with hospitals, we assume that the conceptual elements offer possibilities to learn about the formation of strategies in hospitals. The literature indicates that the integration of deliberate and emergent strategies has to consider that strategy formation in hospitals is dependent on the medical expertise as well as the expertise of the top management. The former can fuel the strategic agenda with unintended strategic issues from the medical realm. The latter faces the competitive environment, developing intended strategic issues, missions and goals. The outlined literature reveals that structure plays a specific role in the simultaneous processing of intended and unintended strategic issues. We assume that intended strategic issues in hospitals are initiated by the board of directors and transferred into

a strategic intent. A centralized structure provides the allocation of strategy-depended resources. Based on the literature, we assume that unintended strategic issues are seen as autonomous bottom-up initiatives that are broadly defined and supported by participation in decentralized structures. While resources and the division of authority are clarified beforehand in the processing of intended strategic issues, in the processing of unintended strategic issues the providing of resources and the authority to act need be established in relation to the open and decentralized structure.

The communication channels differ as well. While in intended strategy formation clear guidelines structure interaction processes, in unintended strategy formation adequate communication channels and interaction procedures have to be established which serve the open and decentralized structure of emergent strategy formation. However, the literature remains scarce with regard to interaction processes within these communication channels.

Due to inductive research methodology (Eisenhardt, 1989; Eisenhardt, Graebner, & Sonenshein, 2016), our empirical investigation is based on these conceptual elements and we use these as theoretical lenses to gain insights into the strategy formation of hospitals. Hence, we ask how intended strategic issues are processed into deliberate strategies and how unintended strategic issues are processed into emergent strategies. Finally, we ask how deliberate and emergent strategies are integrated into the strategic agenda of a hospital.

METHOD

It has been demonstrated that theory of strategy formation in hospitals is poor. Therefore, we applied an embedded, longitudinal, single-case study approach. Case studies can be conducted for several reasons (Burawoy, 2009; Eisenhardt, 1989; Yin, 2014). A case study is of specific interest if the phenomenon is not well understood, complex and needs in-depth analysis. This is especially necessary if the case study focuses on understanding the dynamics and processes within settings (Eisenhardt, 1989). If phenomena have multiple data points and drastic changes

in their development, it is unlikely to capture such phenomena based on a quantitative analysis. Thus, if a problem is not well understood, complex, and dynamic, the longitudinal case study is an appropriate research design in order to identify how and why strategy formation in hospitals occurs.

Data Collection

We conducted purposeful sampling for theoretical reasons (Eisenhardt, 1989). We had the opportunity to select a German hospital group conducting strategy formation over 2 years. The research site is a German hospital group that served a region of about 1.2 million people in a defined geographical area and admitted more than 215,000 patients per year. It consists of 12 maximum-care hospitals and has started to reorganize its strategy formation by using the expertise of physicians in a decentralized structure. The hospital group employs approximately 8,500 staff members across 12 sites and is owned by the region of the federal state. The hospital group faces strong competition within the area, increasing employment costs, expensive patient treatments, and costs for innovative medical technology. To meet these strategic challenges, the board of directors established a set of medical centers that consolidate the medical departments of the hospital group (e.g., anesthesia, trauma surgery, and internal medicine). The head physicians from the medical departments of each of the 12 clinics were appointed to the medical centers. The structure of the medical centers was intended to be decentralized. In a horizontal cooperation between medical experts the overall strategy of the hospital group should be developed and the collaboration between the physicians on strategic issues was encouraged. Specifically, on the one hand, the medical centers had the explicit task of operationalizing the intended strategic issues of the board of directors. On the other hand, the purpose of the centers was to develop new unintended strategic issues based on the medical expertise of its members. Together with at least one member of the board of directors, the members of the medical centers met regularly and one of the head physicians was appointed as the managing director of the

medical center. Besides the medical centers a management committee was established, representing the organization as a whole. The committee was supposed to integrate and manifest the centers' activities throughout the organization. It was represented by the board of directors, medical directors, the administrative managers, and the head physicians from the medical departments. Therefore, this hospital group is an adequate research setting for investigating strategy formation in hospitals

The empirical observation of each of the medical centers enabled us to explore whether intended and unintended strategic issues co-existed within the different medical centers, how they were processed into deliberate and emergent strategies, and how they contributed to the overall strategy of the hospital group. The longitudinal character of the case study offered the opportunity to track patterns of intended and unintended strategic issues over a timeframe of 2 years and provided insight into strategy formation, thereby extending theory from rich data (Yin, 2014). In our embedded, longitudinal, single-case study, we used different methods of data collection. Firstly, we conducted non-participant observation in 37 meetings over a time period of two years. We were able to conduct these observations in all of the meetings that were held by the medical centers or the management committee, with one exception, in which non-participant observation was unwanted. Each of the meetings lasted about 1.5–2.5 hours. In most cases the meetings were typed word-for-word by the researchers. In addition, we received the official protocols of these meetings, which enabled us to compare and validate the data. If strategic topics in these meetings were supported by PowerPoint presentations or additional material, we also received this material. Secondly, we conducted 13 semi-structured interviews with key informants, mainly members of the board of directors (2), top administrative managers (head of personnel; head of controlling) (2), and managing directors (9). The interviews were conducted alongside the non-participant observations and carried out by two researchers. Each lasted between 60 and 120 minutes. All the interviews were tape-recorded and transcribed, with

one exception, in which tape-recording was rejected for personal reasons, and so instead, the two interviewers took detailed notes and compared and transcribed the notes immediately after the interview. The interview guide was based on the former identified conceptual elements, and each interview consisted of three main parts: (1) background information on the interviewee; (2) questions related to the emergence and processing of strategic issues; and (3) questions related to the integration of strategic issues in the strategic agenda. Third, we collected internal and external documents. These documents included annual reports of the hospital group and specifically, the official strategic agenda at the beginning of the research and the official agenda after the strategy development. This procedure enabled us to compare which of the intended and unintended strategic issues out of the medical centers were considered in official strategic documents of the board of directors. In addition, we received the official minutes of the medical centers, which allowed us to validate our observations. Finally, we received minutes and material of meetings of the management committee. Table 1 details information on the key informants, the different meetings attended, and the analyzed documents. The richness and comprehensiveness of the data as well as the ongoing triangulation during the data collection enabled us to gain a holistic picture of strategy formation in the research site.

Insert Table 1 about here

Guided by the literature, we derived an initial coding scheme. Following Creswell (2013), we developed a codebook based on the literature within the realm of strategy formation prior to the coding process, but remained open to unexpected events (in vivo). The coding was undertaken by the researchers using qualitative data analysis software (MAXQDA). Differences between the researchers were discussed and solved by carefully inspecting the data.

Data Analysis

We conducted our analysis in three steps. First, we inspected the formation of intended and unintended strategies in each medical center. We drew upon interviews, observations, and documents to analyze the intended strategic issues and tracked how they were handled in each center. Similarly vein, we tracked the development of the unintended strategic issues in each center. This comparison enabled us to identify commonalities and idiosyncrasies. Finally, in order to evaluate the integration of deliberate and emergent strategies, we compared the documented strategic intent of the board of directors at the start of the medical centers to the operationalization and development of the strategic issues. We compared the results of the strategic work of the medical centers with the new strategic agenda, written down in the official strategic management report. This enabled us to estimate the overall ratio of deliberate and emergent strategies. Then, we moved into a more analytical phase. Data were condensed and aggregated (Miles, Huberman, & Saldaña, 2014). Moving between data, emerging patterns, and theoretical guideposts enabled us to identify relationships of processes in strategy formation. This led us to extend the theory by explaining strategy formation in a tentative model. To establish the rigor of our case study (Yin, 2014), we triangulated our analysis by collecting data from multiple sources, providing extensive quotes from the data, and using multiple investigators to collect and analyze data. To improve the internal validity of the results, we used the analytic technique of pattern matching. After patterns and relationships for each medical center were identified, a comparison between the medical centers was conducted. By analyzing different medical centers, we increased the analytical generalization by strengthening the constructs and relationships (Yin, 2014). Finally, to improve reliability, we carefully documented and clarified our research procedures and established a clear chain of evidence, thereby allowing us to reconstruct how we went from our initial research questions to the final conclusions (Yin, 2014).

RESULTS

Intended Strategic Issues

The medical centers obtained the intended strategic themes from an outlined statement from the board of directors' official strategic agenda. Specifically, the purpose was to engage in operationalizing the strategic intent of the hospital group. "*In joint cooperation, the performance planning and the strategic orientation of each medical realm as well as the overall strategy of the hospital group is to be processed" (official strategic agenda).* We identified eight strategic themes that were initially postulated by the board of directors. As can be seen in Figure 1, at the end of the strategy formation process only three of the intended strategic issues were processed into deliberate strategies (nutritional management; establishment of a diabetic foot center; standardization of medical supplies). Five of the intended strategic issues were not realized (development of medical institution, surgery cooperation, extension of the breast center, establishment of an employee pool, implementation of a medical robot). The following subsections track how these three intended strategies were operationalized in the medical centers. In addition, we observed how and why the intended strategic themes were not realized and why a realization gap occurred at the level of the board of directors. Several patterns emerged from our observations, providing an understanding of the development of the intended strategic issues.

Insert Figure 1 about here

Structure

The managing directors of the medical centers did not receive clear expectations about their *tasks* that went beyond the formal statement of the board of directors. The main task was, more or less, that the medical center has advisory functions with regard to operationalization of the

intended strategic issues. An agreement on objectives was lacking. With no clear task description and aligned goals, the medical centers did not develop or fulfil their advisory functions at the same pace or in a unified direction, as can be seen by the following quotes from the managing directors: *"But there are no strict formal rules: what is the task of the board of directors, what is the task of the centers? Should the board of directors decide and execute the decision or should the centers be involved? Such a clear structure does not exist. It could be clearer"*.

Furthermore, the managing directors interpreted their *role* as coordinators of the meetings. *"My job is more of a structural nature. I care for the meeting taking place, the agenda, and I collect the themes"*. The managing directors were not granted a specific *responsibility*. This led one of our interviewees to the following cynical statement: *"... the name managing director is actually a scorn. There is nothing to direct…A managing director should, in my opinion, be someone who is disposing resources, who directs, and has some influence. Actually, we are advisors…"*.

In addition, the medical centers did not receive any *resources*, meaning there was no additional budget or personnel to conduct the themes elaborated in the medical centers. "*The centers have, according to the rules of procedure, only an advisory function. They have no resources and no personnel"*. Furthermore, they received no *administrative support*. The managing directors complained there was no possibility of receiving reliable data from the administration to support the development of the intended issues.

Interaction in Communication Channels

Sooner or later, it turned out that the discussions of intended strategic issues lacked *criteria* for whether a theme, discussed in the medical center, was worthy of pursuit. There were no prespecified rules for how to systematically work on the intended strategic issues, especially as there was no explicit rule for how intended strategic issues were considered and operationalized by a systematic procedure. Therefore, it was unclear at what point of the discussion the decision

about the intended strategic issues had to be finalized. In one interview a physician commented on the fact that there was no final evaluation regarding the quality of themes, as follows: "*What are our achievements and failures, which quality standards do we hold and how do we orientate at a common goal, which we set".*

Our data demonstrates that most meetings were characterized by discussing *day-to-day problems*, the volume of day-to-day problems is overwhelming in hospitals, and the medical centers seemed to be an adequate forum to exchange ideas on such issues. Here, the usual challenges regularly emerged due to idiosyncrasies of the medical centers: scarcity of beds, pregnancy of female physicians, absenteeism, fluctuation, performance developments, number of cases treated, occupancy rates, and case-mix points. We observed *repetitive* discussions of such day-to-day problems that dominated the discussions in the medical centers.

As a result, time for the operationalization of the intended strategic issues was *limited*. As one of the interviewees mentioned: "*We lacked in developing ideas and strategic ways. However, and this is my strong belief, this is why we are here. We need to take economic aspects into account, but similarly need to make good decisions about where to go in future".*

Medical centers had different expectations regarding adequate *procedures* for how the intended strategic issues should be addressed. Several possible recipients for the issues exist, such as managing directors, the board of directors, and the top management team. Furthermore, our interviews and observations reveal that *decisions* about intended strategic issues can be subdivided into two categories. On the one hand, issues with high investments went directly to the board of directors for final decisions. On the other hand, strategic issues with low investments, for example, medical equipment, had to be decided autonomously by the medical centers.

Overall, our findings reveal that strategic topics had the best chance of succeeding under the following three circumstances. First, most hospitals within the hospital group were *concerned* about these topics. Second, most hospitals should *profit* from these topics. Third, the

medical center managed to *communicate* these strategic issues to relevant groups and finally moved the strategic issues to the decisions makers. For example, nutritional management was introduced by a managing director and discussed within one of the medical centers. "*The third topic is the nutritional management. It works out well in the DRG-system and we have made profit of 150,000 Euro. That's why we initiated a workgroup in order to create standards and to promote the company-wide implementation".* This theme was accepted by other medical centers as relevant, and this broad support, as well as the economic motive, supported the acceptance as a deliberate strategy.

However, even if the medical centers had matched the formerly mentioned criteria, the board of directors made the final decision. Figure 1 demonstrates an important insight that the decision about the realization of intended strategic issues was conducted in a very late phase of the strategy formation process. For example, in one case (implementation of a medical robot), the board rejected the realization of an intended strategic issue for ambiguous reasons. In another strategic theme (establishment of an employee pool), the criteria had been fulfilled as the experienced formation criteria, but the board of directors delayed decisions or did not manage to delegate clear division of labor to operationalize the intended strategic issue into a deliberate strategy. Therefore, the reasons for strategic decisions being rejected or delayed were not transparent. It remained unclear what criteria were valid for the final decision regarding the intended strategic issues. As a result, for the intended strategic issues, we identified a *realization gap* at the level of the board of directors (see Figure 1).

Unintended Strategic Issues

Although the main purpose of the medical centers was to engage in operationalizing the strategic intent of the hospital group, the medical centers were also requested to prepare *"...decisions regarding medical themes, generating of strategies, or employee management themes as rec-*

ommendations for the board of directors" (official strategic agenda). In the following we illustrate how unintended strategic issues that were initially discussed as strategically relevant in the medical centers, were processed into emergent strategies, and which of these strategic themes were unrealized. As can be seen in Figure 2, we observed that one of the unintended strategic issues was processed into an emergent strategy (management of operating rooms). Ten of the unintended strategic issues were not realized (bed management, process optimizing, marketing operations, expansion of the performance spectrum, coding, development of the medical center, emergency room, ward management, referring physicians, internal cooperation).

The following subsections track how the unintended strategies became emergent strategies. We analyzed how and why unintended strategic issues were not considered further and why a realization gap occurred at the level of the medical centers. In this respect, several patterns emerged, which provided an understanding for the development of the unintended strategic issues.

Insert Figure 2 about here

Structure

One of the managing directors described the medical centers as an ideal opportunity to develop new strategy initiatives: *„The structure enabled us to exchange information and to look for commonalities and idiosyncrasies and by that define and move forward projects related to our realm. Ideally the medical center provides suggestions to the board of directors. In reality the development of projects as well as the decision and implementation of new strategic initiatives did not meet the intended standards".* Reasons for not meeting these tasks of the medical centers were similar to those for the operationalization of the intended strategic issues. Again, the unclear *role* of the managing directors had several consequences for the collection and discus-

sion of strategic initiatives. One of the managing directors gave a description of a typical procedure: "*I perceive the themes of the head physicians, put order into the initiatives, and put the themes into the agenda of the meetings, whereby themes partially come from myself".*

Since the managing directors lacked any *responsibility*, themes were introduced at random. As one interviewee stated: "*... we need input from the board of directors, in order to know, into which direction it should go, in which direction we should think".* Neither the initiator of the strategic issue nor the managing directors felt responsible for preparing the themes.

Without any *resources*, the introduction of strategic themes was characterized by superficial preparation of all of the members of the medical centers. Even if the medical centers demanded information from the administration in order to prepare and discuss strategic themes, most managing directors felt that *administrative support* was weak. Thus, many members of the medical centers used the discussions to introduce themes according to preferences based on their medical backgrounds.

Interaction in Communication Channels

Although the structure of the medical centers was interpreted as ideal for the development of medical and strategic themes, in reality, unclear tasks and roles, lack of responsibility, and gaps in support led to superficial and exhausting discussions within the medical centers. Most themes were put on the agenda several times, discussed, and disappeared. As a result, the medical centers spent most of their time discussing 'apples and oranges'. Without preparation or information, the discussion bobbed up and down until the participants left the topic from sheer exhaustion: *"We organize ourselves into a disaster. Again, we need to form another working group".* In our interviews, this up and down of themes without any results were interpreted as wasting time.

We observed two main problems with regard to the strategy formation interaction processes. Firstly, it remained unclear what *criteria* should be applied to evaluate a new strategic

theme as worthy of pursuit. Secondly, there were no clear *procedures* for how to proceed with new strategic initiatives. In addition, it was unclear which hierarchical level was responsible for the *final decision*. Most unintended strategic issues were undecided, vanished, and were not further considered as strategic themes in strategy formation. On the contrary, one of the medical centers was successful in establishing a new management of operating rooms in all of the hospitals. We observed similar reasons for the survival of this unintended strategic issue and its acceptance as an emergent strategy by the board of directors. First, the management of operating rooms was successful because of its *interdisciplinary* status. There was overall agreement that the operating rooms were not working to capacity and should be optimized. Second, it could be demonstrated that an optimization strategy would increase the *profit* of the hospital group. Third, the strategic issue went *beyond the boundaries* of the medical centers, was presented at the management committee, and finally, was accepted by the board of directors.

As Figure 2 shows, the formation of all unintended strategic issues ended at a very early phase of strategy formation, with one exception, in which the strategic issue of the management of operating rooms was processed into an emergent strategy. Without the aforementioned support, the formation of unintended strategies ran a higher risk of being disregarded. Compared to the formation of intended strategic issues, unintended strategic issues had a small chance of succeeding and often were eliminated at the level of the medical centers and did not reach the management committee. We deepen our understanding of this finding in the discussion section.

Strategic Agenda

Over a time span of 2 years, medical centers operationalized three out of eight intended strategic issues, which were included in the new strategic agenda (see Figure 1). With regard to unintended strategic issues, these centers developed 11 new strategic issues. Of these 11, 1 became emergent and was included in the new strategic agenda (see Figure 2). While deliberate strategies are less than the number of intended strategic issues, the number of emergent strategies is

far less than the initially discussed unintended strategic issues. The *integration* of deliberate and emergent strategies in the new strategic agenda can be considered as follows. The ratio of deliberate strategies to unrealized strategic issues is 3:5. The ratio of emergent strategies and unrealized strategic issues is 1:10. Obviously, the integration of deliberate strategies and emergent strategies is dominated by intended strategic issues becoming deliberate strategies. Intended strategic issues are more likely to be accepted by the board of directors and integrated into the new agenda than are unintended strategic issues.

DISCUSSION

Our study contributes to a better understanding of how intended strategic issues and unintended strategic issues are processed and integrated in hospitals. Based on the outlined theoretical background, our investigation focuses on a-priori conceptual elements, especially strategic initiative, strategic planning, structure, and communication channels. We provide a model of processing and integration of intended and unintended strategic issues in hospitals. Figure 3 gives an insight into the co-existence of intended and unintended strategic issues (1). Furthermore, the figure emphasizes the interplay of structure and interaction and displays the identified structural elements and interaction processes accordingly (2). Finally, the figure visualizes the integration of deliberate and emergent strategies into the strategic agenda (3). Overall, our model identifies what hospitals can learn as they gain experience in strategy formation processes. In the following we discuss our findings according to the model of strategy formation in hospitals in detail.

Insert Figure 3 about here

Our research makes two contributions. First, our study adds to the existing research by providing insight into simultaneously *processing* intended and unintended strategic issues into deliberate and emergent strategies (e.g., Andersen, 2004; Canales, 2015). Our study reveals that

medical centers are an adequate template for both the operationalization of intended strategic issues and the development of unintended strategic issues. The combination of management intent and the exchange of strategic relevant medical issues in medical centers is seen as an ideal structure. In line with prior research, it can be confirmed that the structure of medical centers avoids tribalism between medical vocations and promotes collaboration between management and medical expertise (Bate, 2000). The board of directors can communicate the strategic intent top-down, and medical experts can introduce promising medical themes bottom-up. Our findings are in line with prior research that the success of strategy formation depends on the co-existence of emergence and planning (Andersen, 2004, p. 1273). Specifically, our contribution lies in the rich descriptions and analysis of structure and interaction within the strategy formation process. We highlight that structure matters. Unclear tasks, unclear roles, no responsibility, lack of resources, and lack of administrative support hamper effective management of strategy formation in both of the strategy types. In line with prior research (Grant, 2003), our study indicates that unclear tasks undermine the processing of intended and unintended strategic issues. In particular, our finding corroborates research that clear tasks serve as an umbrella that guides strategy formation and that the board of directors plays a key role in both formulating and communicating the tasks (Lavarda et al., 2010; Mirabeau & Maguire, 2014). In addition, we propose from the data that vague roles and responsibilities in combination with insufficient resources and administrative support hamper effective strategy formation (Alexander et al., 1996; Harrison & Kimani, 2009).

Furthermore, our model demonstrates that interaction matters. We identify that unclear criteria, non-transparent procedures, and unpredictable decision making decrease effective strategy formation in hospitals. In the absence of clear criteria not strategically relevant themes tend to occupy the communication channels. In addition, our findings demonstrate that non-transparent procedures undermine the processing of strategic issues. This corroborates research

that formal interaction procedures are prerequisites for handling and processing strategic issues (Huxham & Vangen, 2000; Ocasio & Joseph, 2005). Transparent procedures are necessary to ensure a common understanding whether to pursue a strategic issue or not (Huxham & Vangen, 2000). Finally, this is accompanied by unpredictable decision making when the board of directors does not outline guidelines regarding the acceptance or rejection of strategic issues.

The interplay of structure and interaction is hampered by ambiguous components of the structure. In our observations the structural elements influence the interaction. Without clear goals and structure day-to-day problems escalate. This finding supports prior work, suggesting that strategy formation without structure can lead to “talking shops” without end (Bate, 2000, p. 508). In contrast, the interaction influences the use of the structure. The medical centers represent an appropriate structure to integrate medical expertise and management competence in strategy formation. However, given unclear criteria, non-transparent procedures, and unpredictable decision making, medical experts do not use the structure in the way initially intended. The interaction is characterized by the exchange of knowledge and experiences within the experts' realms. As a result, unintended strategic issues are not systematically prepared, strategically channeled, and transferred to the management committee and to the board of directors.

Our second contribution relates to the *integration* of strategy formation. Overall, our data reveal that three deliberate strategies and one emergent strategy are integrated in the new strategic agenda. This represents a ratio of deliberate strategies to unrealized strategic issues of 3:5, and ratio of emergent strategies and unrealized strategic issues of 1:10. Given the amount of time, personnel, and expertise, we estimate the outcome of the strategy formation process as not comprehensive. Our analysis shows that deliberate and emergent strategies are not pari passu elements of strategy formation in hospitals. The strategy formation process is dominated by intended strategic issues becoming deliberate strategies. Furthermore, with regard to the intended strategic issues, we identified a *realization gap* when the board of executives rejected

the elaborated strategic issues (see Figure 1). With regard to the unintended strategic issues, the realization gap was considerably earlier (see Figure 2). New initiatives disappear early without clear criteria, support, and legitimization. Our study suggests that unintended strategic issues have a smaller chance to be successful in strategy formation compared to intended strategic issues and need more support in terms of structure and interaction. These findings extend prior research regarding the development of emergent strategies (Huxham & Vangen, 2000; Mirabeau & Maguire, 2014). We cannot confirm that bottom-up strategy formation facilitates, as proposed by Kim et al. (2014), the development of unintended strategies. Unintended strategic issues have to face a broad range of themes and interests with an unpredictable outcome. In addition, these themes tend to disappear in several communication channels and to be neglected in strategic decision making processes. As a result, an increase in the participation and the involvement of actors in the development of unintended strategic issues needs structure, transparent procedures, and predictable decision making.

PRACTICE IMPLICATIONS

For hospital executives, it is of utmost importance to consider strategy formation as a combination of management and medical expertise. As a first step, relevant strategic issues have to be identified, evaluated, and processed in an adequate structure, for example, in medical centers. Second, such structures must have clear tasks, roles, responsibilities, sufficient resources, and administrative support in decentralized strategy formation. In addition, interaction processes require clear criteria, transparent procedures, and mandatory decision making. Finally, based on the results of this research, the integration of strategic issues into the new strategic agenda would be particularly successful under the following circumstances. First, most of the interest groups are concerned with the strategic issue. Second, there is an estimation of prospective profits. Lastly, relevant decisions makers are involved early. Therefore, managers and medical experts should stress the interdisciplinary status of the strategic issue from the start, take

into account the economic point of view, and ensure extensive information distribution throughout the formation process.

REFERENCES

Al-Amin, M., Zinn, J., Rosko, M. D., & Aaronson, W. (2010). Specialty hospital market proliferation: Strategic implications for general hospitals. *Health Care Management Review*, *35*(4), 294–300. doi:10.1097/HMR.0b013e3181e04a06

Alexander, J. A., D'Aunno, T. A., & Succi, M. J. (1996). Determinants of rural hospital conversion: A model of profound organizational change. *Medical Care*, *34*(1), 29–43.

Andersen, T. J. (2004). Integrating decentralized strategy making and strategic planning processes in dynamic environments. *Journal of Management Studies*, *41*(8), 1271–1299. doi:10.1111/j.1467-6486.2004.00475.x

Bate, P. (2000). Changing the culture of a hospital: From hierarchy to networked community. *Public Administration*, *78*(3), 485–512. doi:10.1111/1467-9299.00215

Buechner, V. A., Schreyoegg, J., & Schultz, C. (2014). The impact of the board's strategy-setting role on board-management relations and hospital performance. *Health Care Management Review*, *39*(4), 305–317. doi:10.1097/HMR.0b013e31829fca10

Burawoy, M. (2009). *The extended case method: Four countries, four decades, four great transformations, and one theoretical tradition*: University of California Press.

Canales, J. I. (2015). Sources of selection in strategy making. *Journal of Management Studies*, *52*(1), 1–31. doi:10.1111/joms.12101

Canet-Giner, M. T., Fernández-Guerrero, R., & Peris-Ortiz, M. (2010). Changing the strategy formation process in a service cooperative. *Journal of Organizational Change Management*, *23*(4), 435–452. doi:10.1108/09534811011055412

Chreim, S., & MacNaughton, K. (2016). Distributed leadership in health care teams: Constellation role distribution and leadership practices. *Health Care Management Review*, *41*(3), 200–212.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks: Sage Publications.

Dutton, J. E., Ashford, S. J., O'Neill, R. M., & Lawrence, K. A. (2001). Moves that matter: Issue selling and organizational change. *Academy of Management Journal*, *44*(4), 716–736.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, *14*(4), 532–550.

Eisenhardt, K. M., Graebner, M. E., & Sonenshein, S. (2016). Grand challenges and inductive methods: Rigor without rigor mortis. *Academy of Management Journal*, *59*(4), 1113–1123. doi:10.5465/amj.2016.4004

Elbanna, S. (2006). Strategic decision-making: Process perspectives. *International Journal of Management Reviews*, *8*(1), 1–20.

Glouberman, S., & Mintzberg, H. (2001). Managing the care of health and the cure of disease—Part I: Differentiation. *Health Care Management Review*, *26*(1), 56–69.

Grant, R. M. (2003). Strategic planning in a turbulent environment: Evidence from the oil majors. *Strategic Management Journal*, *24*(6), 491–517. doi:10.1002/smj.314

Harrison, M. I., & Kimani, J. (2009). Building capacity for a transformation initiative: System redesign at Denver Health. *Health Care Management Review*, *34*(1), 42–53.

Hutzschenreuter, T., & Kleindienst, I. (2006). Strategy-process research: What have we learned and what is still to be explored. *Journal of Management*, *32*(5), 673–720. doi:10.1177/0149206306291485

Huxham, C., & Vangen, S. (2000). Leadership in the shaping and implementation of collaboration agendas: How things happen in a (not quite) joined-up world. *Academy of Management Journal*, *43*(6), 1159–1175. doi:10.2307/1556343

Jarzabkowski, P., Balogun, J., & Seidl, D. (2007). Strategizing: The challenges of a practice perspective. *Human Relations*, *60*(1), 5–27.

Kerpershoek, E., Groenleer, M., & Bruijn, H. de. (2016). Unintended responses to performance management in Dutch hospital care: Bringing together the managerial and professional perspectives. *Public Management Review*, *18*(3), 417–436.

Kim, Y. H., Sting, F. J., & Loch, C. H. (2014). Top-down, bottom-up, or both? Toward an integrative perspective on operations strategy formation. *Journal of Operations Management*, *32*(7-8), 462–474. doi:10.1016/j.jom.2014.09.005

Kitchener, M. (1998). Quasi-market transformation: An institutionalist approach to change in UK hospitals. *Public Administration*, *76*(1), 37–95.

Lavarda, R. A. B., Canet-Giner, M. T., & Peris-Bonet, F. J. (2010). How middle managers contribute to strategy formation process: Connection of strategy processes and strategy practices. *Revista de Administração de Empresas*, *50*(4), 358–370.

Lovas, B., & Ghoshal, S. (2000). Strategy as guided evolution. *Strategic Management Journal*, *21*(9), 875–896.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (Third edition). Thousand Oaks: Sage Publications.

Mintzberg, H. (1997). Toward healthier hospitals. *Health Care Management Review*, *22*(4), 9–18.

Mintzberg, H. (1978). Patterns in strategy formation. *Management Science*, *24*(9), 934–948. doi:10.1287/mnsc.24.9.934

Mintzberg, H., & Glouberman, S. (2001). Managing the care of health and the cure of disease—Part II: Integration. *Health Care Management Review*, *26*(1), 72–86.

Mirabeau, L., & Maguire, S. (2014). From autonomous strategic behavior to emergent strategy. *Strategic Management Journal*, *35*(8), 1202–1229. doi:10.1002/smj.2149

Noda, T., & Bower, J. L. (1996). Strategy making as iterated processes of resource allocation. *Strategic Management Journal*, *17*(S1), 159–192.

Ocasio, W., & Joseph, J. (2005). An attention-based theory of strategy formulation: Linking micro- and macroperspectives in strategy processes. In G. Szulanski, J. Porac, & Y. Doz (Eds.), *Advances in Strategic Management: Volume 22. Strategy process* (pp. 39–62). Oxford: Elsevier Ltd.

Pappas, J. M., Flaherty, K. E., & Wooldridge, B. (2004). Tapping into hospital champions - Strategic middle managers. *Health Care Management Review*, *29*(1), 8–16.

Raes, A. M. L., Glunk, U., Heijltjes, M. G., & Roe, R. A. (2007). Top management team and middle managers: Making sense of leadership. *Small Group Research*, *38*(3), 360–386. doi:10.1177/1046496407301969

Ridder, H.-G., Doege, V., & Martini, S. (2007). Differences in the implementation of diagnosis-related groups across clinical departments: A German hospital case study. *Health Services Research*, *42*(6 Pt 1), 2120–2139.

Solstad, E., & Pettersen, I. J. (2010). The role of path dependency in a hospital merger. *Qualitative Research in Organizations and Management: An International Journal*, *5*(3), 238–258.

Tiemann, O., & Schreyoegg, J. (2012). Changes in hospital efficiency after privatization. *Health Care Management Science*, *15*(4), 310–326. doi:10.1007/s10729-012-9193-z

Wells, R., Lee, S. Y.D., McClure, J., Baronner, L., & Davis, L. (2004). Strategy development in small hospitals: Stakeholder management in constrained circumstances. *Health Care Management Review*, *29*(3), 218–228.

Yin, R. K. (2014). *Case study research: Design and methods*. Thousand Oaks: Sage Publications.

Table 1: Summary of Data Collection

Domain		Profession	Function	Inter-views	Type of meeting	Non-participant observations	Pages of transcripts	Documents		
								Official meeting protocols	Official documents	Newspaper articles
Medical Center	Medical center of general surgery	Head physician of general surgery	Managing director of the center	1	Meeting of the medical center of general surgery	3 (4,5h)	14	3	7	
	Medical center of anesthesia	Head physician of anesthesia	Managing director of the center	1	Meeting of the medical center of anesthesia	3 (4h)	14	3	5	
		Head physician of anesthesia	Managing director of the center	1						
	Medical center of urology	Head physician of urology	Managing director of the center	1	Meeting of the medical center of urology	3 (4h)	17	3	9	2
	Medical center of obstetrics/ gynecology	Head physician of gynecology	Managing director of the center	1	Meeting of the medical center of obstetrics/ gynecology	3 (5h)	28	3		
	Medical center of emergency medicine and orthopedics	Head physician of orthopedics	Managing director of the center	1	Meeting of the medical center of emergency medicine and orthopedics	3 (5h)	25	3	3	1
	Medical center of radiology	Head physician of radiology			Meeting of the medical center of radiology	3 (3h)	6	3		
	Medical center of cardiology	Head physician of cardiology	Managing director of the center	1	Meeting of the medical center of cardiology	3 (4,5h)	15	3		
	Medical center of internal medicine	Head physician of internal medicine	Managing director of the center	1	Meeting of the medical center of internal medicine	3 (3h)	7	3	2	
	Medical center of head surgery	Head physician of neurology	Managing director of the center	1	Meeting of the medical center of head surgery	3 (4,5h)	15	3		
Management committee					Meeting of the management committee	8 (16,5h)	56	8		
					Executive workshop	2 (11h)	25	2	4	
Hospital Group	Members of the board		Board director A	1					4	83
			Board director B	1						
	Top administrative managers		Head of personnel	1						
			Head of controlling	1						
	Total			**13**		**37 (65 hours)**	**222**	**37**	**34**	**86**

Figure 1: Realization Gap in Deliberate Strategy Formation

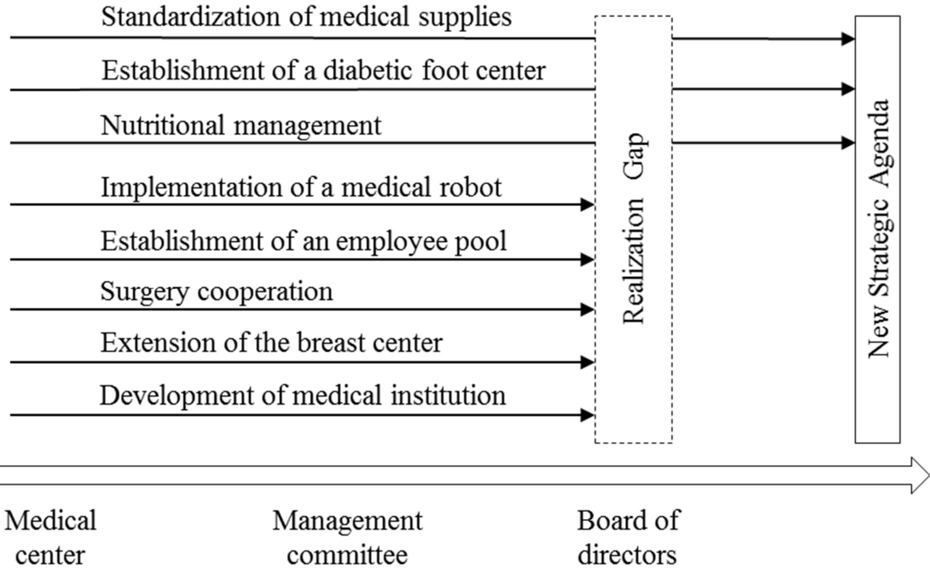


Figure 2: Realization Gap in Emergent Strategy Formation

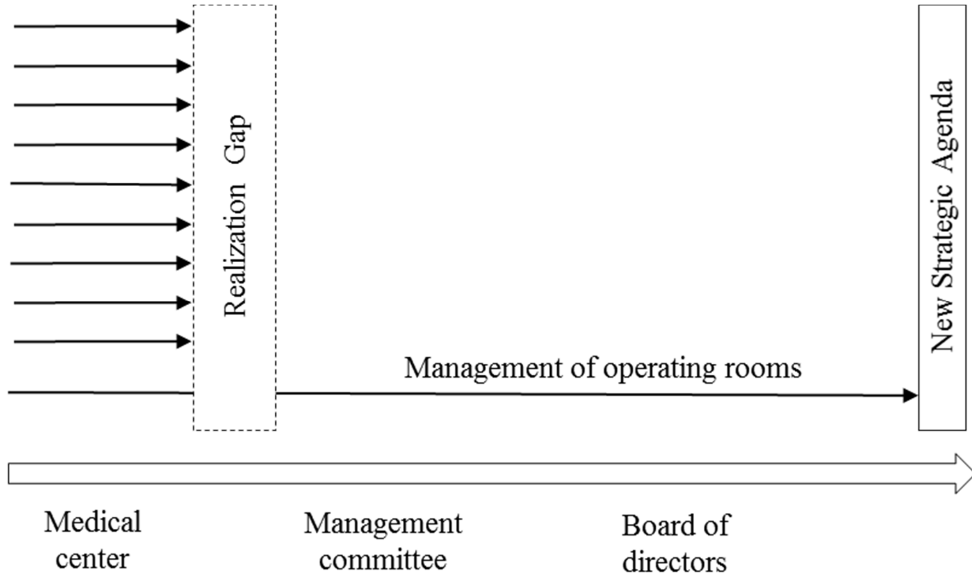
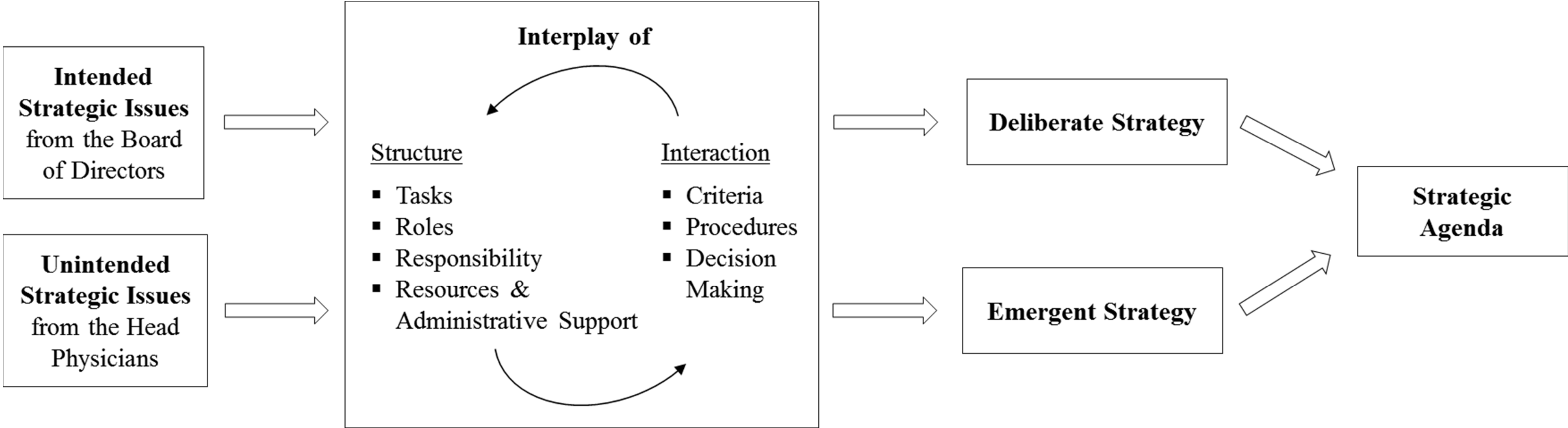


Figure 3: Processing and Integration of Intended and Unintended Strategic Issues in Hospital



Paper 3

Strategy Formation in Complex Organizations –

The Evolution of Strategic Issues in Hospitals

Schrader, J. S.

International Journal of Public Administration

Submitted and under review

Based on the following previous versions:

Schrader, J. S. (2018): Strategy Formation in Complex Organizations – The Evolution of Strategic Issues in Hospitals. Paper presented at the 22nd International Research Society on Public Management Conference, Edinburgh, Scotland, April, 11th – 13th, 2018.

Strategy Formation in Complex Organizations –

The Evolution of Strategic Issues in Hospitals

ABSTRACT

This study investigates strategy formation in complex organizations by empirically tracking the evolution of strategic issues in hospitals. Theoretically, it builds on the evolutionary perspective of strategy formation. Given the utmost importance of successfully integrating strategic issues in the strategic agenda, this study focuses on how the structural and strategic contexts infuence strategic issues' evolution. A case study is conducted in a German hospital group in which medical and management expertise are integrated in strategy formation. Five evolution paths of strategic issues are identified, and a model of their evolution is developed. Overall, this study heeds the call to more holistically depict how strategic issues evolve, and contributes to the research viewing strategy as an iterated process of resource allocation. By discussing the empirically elaborated constraints and supports in the evolution of strategic issues in hospitals, a better understanding of strategy formation in complex organizations is provided.

Keywords: Strategy Formation in Hospital; Strategic Issue; Complex Organization; Issue Selection; Evolutionary Perspective; Selection Criterion; Case Study; Qualitative Research

INTRODUCTION

The characteristics of complex organizations challenge the traditional strategy-making approach. Often confronted by ill-structured problems and uncertain situations, such organizations seem ill-suited for the analytic and rational planning of strategy (Baer et al., 2013, 2013; Hutzschenreuter & Kleindienst, 2006; Sminia, 2009). Specifically, studies reveal that complex organizations are specific in their strategic orientation; consequently, an integrative approach to strategy formation, comprising both strategic planning and strategic learning processes, must be adopted (Lavarda, Canet-Giner, & Peris-Bonet, 2010; Mintzberg & Waters, 1982).

Hospitals offer a highly complex environment in which to analyze the evolution of strategic issues. Based on their external and internal characteristics, hospitals are regarded as a typical form of *complex organizations,* often subject to strategic change and restructuring processes (Currie, Waring, & Finn, 2008; McDaniel & Driebe, 2001; Plsek & Wilson, 2001; Zimmerman, Lindberg, & Plsek, 1998). Hospitals operate in a very dynamic environment, characterized by constant changes in market conditions and frequent structural reforms (Denis, Lamothe, & Langley, 2001; Salfeld, Hehner, & Wichels, 2009). Furthermore, increasing regulatory supervision, privatization, rising health expenditure, and tight public budgets all lead to an intensified competition in the hospital market (Alexander, D'Aunno, & Succi, 1996; Currie & Lockett, 2011; Johansson & Borell, 1999; Tiemann & Schreyoegg, 2012). Internal conditions also challenge hospitals' strategy formation processes (Alexander et al., 1996; Kitchener, 1998). For example, tensions between managers and physicians, caused by ambiguous power relationships and divergent objectives, complicate strategic processes (Baker & Denis, 2011; Mintzberg, 2012). Furthermore, identity differences and divergent cognitive schemata make communication between employee groups more complex and can impede joint strategy formation (Llewellyn, 2001).

Given these external and internal constraints, strategic issues in hospitals cannot solely be developed, selected, and integrated into the strategic agenda by the executive board; medical experts' input is also required. In the age of new public management (NPM), strategic decisions must accord with economic and medical demands, building on both medical and management knowledge. In this respect, studies indicate a trend towards involving physicians in management (Noordegraaf, 2011). "The hybridization of professional workers into managerial roles has been particularly prevalent within health care" (Burgess, Strauss, Currie, & Wood, 2015, p.88). These "hybrid" middle managers are professional workers, such as doctors, who hold both managerial and professional responsibility and act between the executive board and other medical employees (Llewellyn, 2001; McGivern, Currie, Ferlie, Fitzgerald, & Waring, 2015).

The collaboration of managerial and medical experts and the use of mutually exclusive knowledge seem to be critical for strategy-making (Chreim & MacNaughton, 2016; Ford-Eickhoff, Plowman, & McDaniel, 2011). Although changes in the public sector and the diffusion of NPM have been intensively studied (Currie, Koteyko, & Nerlich, 2009; Dent, Howorth, Mueller, & Preuschoft, 2004; Santiago, Carvalho, & Sousa, 2015), research on strategy formation through combining management and medical expertise is scarce. Especially in Europe, the development of hybrid management boards is a more recent phenomenon in the public sector. Specifically, there is little knowledge about the case of Germany, offering a health care system that is very different, for example, to the UK. Since German governments cannot regulate the management of hospitals directly, the hospital system is characterized by a strong local autonomy and NPM has not been adopted in a pure form (Bode & Maerker, 2014; Dent, 2005). Moreover, scholars claim that strategy content is addressed far more often than strategy process (Hafsi & Thomas, 2005; Huff & Reger, 1987), and the question "Where does a firm's

strategy come from […] has received less attention than it merits" (Gavetti & Rivkin, 2007, p. 420).

Specifically, it remains unclear how strategic issues in hospitals evolve, as studies often give only a "one point-in-time snapshot of strategy" (Shortell, Morrison, & Robbins, 1985, p. 248), rather than a holistic overview. To understand the entire strategy formation process, scholars highlight the need to pay closer attention to the role of the *structural* and *strategic contexts* in strategic issues' evolution (Shepherd & Rudd, 2014). For example, Veronesi, Kirkpatrick, and Altanlar (2015) call for focus on organizational characteristics that might shape the strategy formation process, such as the impact of clinical participation in board-level decision-making or the importance of formal autonomy. Furthermore, it remains vague how the *selection* of strategic issues actually takes place and why some strategic issues are selected in forming strategy while others are not (Burgelman, 1991; Canales, 2015).

This study aims to address these gaps by empirically investigating the effect of the structural and strategic contexts on the strategy formation process and tracking the entire evolution of strategic issues. In this vein, strategic issues are defined as *"…events, developments, and trends that an organization's members collectively recognize as having some consequence to the organization*" (Dutton & Dukerich, 1991, p. 518). Theoretically, this study builds on the process model of strategy-making (Burgelman, 1983), which serves as a conceptual tool to view strategy-making as an intra-organizational process of variation, selection, and retention. Based on the evolutionary perspective of strategy formation, the organization is viewed as an ecology of strategic initiatives that emerge in patterned ways and compete for limited organizational resources (Burgelman, 1983, 1991). Specifically, in hospitals, the *variation* of strategic issues stems from both the induced strategic issues from the executive board and autonomous strategic issues from the medical professionals. However, not all strategic issues are realized. Therefore, a *selection* of strategic issues is of importance and

affects which of the strategic issues are finally *retained* in the strategic agenda. The successful evolution of strategic issues is of utmost importance. This paper thus explores the following research questions:

- *How and why are strategic issues selected in the strategy formation process*?
- *How and why do the structural context and strategic context influence the evolution of strategic issue*s?

The empirical study investigates how strategic issues evolve in a German public hospital group in which strategy is formed through medical and management expertise. Based on the empirical findings, different development paths of strategic issues are identified, and a model of strategic issues' evolution is developed. Overall, the study meets the need to more holistically depict how strategic issues evolve and extends the process model of strategy-making (Burgelman, 1983). Specifically, the strategic and structural contexts are specified, the effects of both contexts on the evolution of strategic issues are analyzed, and two precise selection mechanisms of strategic issues are identified.

THEORETICAL BACKGROUND

This study is theoretically rooted in strategy process research that views strategy as an iterated process of resource allocation. It draws on Burgelmann's (1983) process model of strategy-making, which serves as a useful tool to conceptualize the combination of management and medical expertise in strategy-making patterns.

Following the variation-selection-retention framework of cultural evolution theory, strategy formation is viewed as an intra-organizational process (Weick, 1979). On the one hand, the v*ariation* of strategic issues results from the executive board's behavior, advancing induced strategic issues coupled with the organization's strategy. On the other hand, front-line and middle managers engage in activities outside the current strategy's scope, thereby advancing autonomous strategic issues. They are often the first to recognize strategic problems and

opportunities (Pascale, 1984), and provide the impetus for new autonomous strategic issues (Burgelman, 1983; Mintzberg & Waters, 1982). The *selection* of strategic issues constitutes the next step in the strategy-making process, characterized by the allocation of attention and resources to selected strategic issues. Specifically, by setting up the *structural context*, i.e., administrative and cultural mechanisms such as the organizational architecture and information and measurement systems, the executive board tries to exercise critical influence over strategic issue selection to ensure fit with the organizational strategy. By contrast, the *strategic context* is determined by the communication processes and political efforts of front-line and middle managers. By altering the strategic context, they try to convince the executive board that the current strategy concept needs changing and that new autonomous strategic issues should be selected (Noda & Bower, 1996). The third step in the process model is the *retention* of strategic issues, whereby they are manifested in a new strategic agenda whose final articulation is performed by the executive board (Burgelman, 1991). The retention of induced strategic issues in the agenda is the institutionalization of strategic decisions into practices and goals (Crossan, Lane, & White, 1999). In contrast, the retention of autonomous strategic issues in the strategic agenda is characterized by learning processes and acquiring new distinctive competencies (Burgelman, 1991; Crossan et al., 1999). By distinguishing induced and autonomous strategic issues, Burgelman (1983) echoes Mintzberg's (1978) distinction of *deliberate* and *emergent* strategies, albeit with different labels (Mirabeau & Maguire, 2014).

Well-known research programs have built on the process model of strategy-making. They consider strategy formation as a process of induced and autonomous strategic behavior, and view the organization as an ecology of strategic initiatives (e.g. Canales, 2015; Mirabeau & Maguire, 2014; Noda & Bower, 1996). These studies provide useful insight into strategic processes, but most offer only *partial* perspectives on strategic issues' evolution. As the variation, selection, and retention of strategic issues have only been investigated separately, it

remains questionable how strategic issues evolve and how the content of an organization's strategy emerges. Scholars claim that to better understand the complete evolution of strategic issues and gain insight into the shifts between the variation, selection, and retention of strategic issues, it is necessary to detailly investigate the role of the *structural* and *strategic contexts* (Elbanna & Child, 2007; Shepherd & Rudd, 2014). In this respect, theoretical work indicates that, in combination, these contexts constitute internal selection processes (Burgelman, 1991; Noda & Bower, 1996). Burgelman (Burgelman, 1991) mentions that an autonomous strategic issue can only become part of the strategic agenda once its viability has become reasonably certain. This implies the existence of certain selection criteria, but he does not elaborate on how strategic issues are actually selected. Furthermore, there is scarce literature on how the structural and strategic contexts affect the other evolution phases, i.e., the variation and retention of strategic issues.

Only a few studies provide insight into a priori conceptual elements that specify an organization's structural and strategic contexts. The *structural context* is determined by executive board choices that aim to influence the perceived interests of strategic decision-makers. For example, the executive board plays a key role in setting the organization's *strategic intent* (Canales, 2015; Canet-Giner, Fernández-Guerrero, & Peris-Ortiz, 2010). By articulating formal statements that enunciate the organization's strategic direction, strategic intent guides the formation of induced and autonomous strategy patterns (Mirabeau & Maguire, 2014). Furthermore, because autonomous strategic issues are primarily initiated bottom-up by middle managers, and often transcend the current strategy's scope, the executive board engages in *strategic planning* and *coordination activities* to foster the coherent evolution of strategic issues. Here, the operationalization of goals and the coordination of resources characterize typical management activities (Baer et al., 2013; Bisbe & Malagueño, 2012; Fanelli, Lanza, & Zangrandi, 2017). Structural context determination also encompasses choices on the

organization's structural configuration (Burgelman, 1983). Specifically, scholars demonstrate that a *decentralized organizational structure* is more conducive to the formation of autonomous strategic issues compared to a centralized structure (Kim, Sting, & Loch, 2014). Furthermore, the *structural position* and the extent to which actors have *formal authority* to personally promote new strategic issues influence their tendency to participate in developing, and thereby shaping the variation of, induced and autonomous strategic issues (Wells, Lee, McClure, Baronner, & Davis, 2004). Finally, *procedural channels, communication channels*, and organizational *rules* can be associated with the structural context. By defining the "formal and informal principles of action, interaction, and interpretation" (Ocasio, 1997, p. 197), they guide and constrain the evolution of strategic issues.

Regarding the determination of the *strategic context*, the literature indicates that this process is influenced by the *communication processes* and *political behavior* of strategic decision-makers. For example, Sminia (2005) identifies the ways and frequency of actors' communication as significant influences on which strategic issues receive attention. Scholars also emphasize the extent to which actors *participate in decisions* as relevant to the organization's strategic outcomes. Active participation in decision-making and the deliberate diagnosis of strategic issues involve a high degree of information analysis, resulting in more nuanced views of strategic issues that influence which are selected (Andersen, 2004; Baer et al., 2013). Another communication process relevant to determining strategic context is *constructive confrontation*. This can be understood as open debate about the business value of different strategic issues, characterized by mutually influencing processes that aim to find common or complementary interests (Raes, Heijltjes, Glunk, & Roe, 2011). Apart from the described communication processes, the *political behavior* of middle managers is another relevant strategic determination process. Since the executive board has limited attention and strategic initiatives compete for limited organizational resources, middle managers engage in

championing and *issue-selling* behaviors to gain support for a strategic issue (Dutton, Ashford, O'Neill, & Lawrence, 2001; Ocasio, 1997). While issue-selling involves the presentation of more abstract strategic ideas, championing is the promotion of concrete strategic solutions to the executive board, aiming to convince them to adjust the current strategy concept (Ashford, Rothbard, Piderit, & Dutton, 1998).

In sum, the successful evolution of strategic issues is fundamental to organizations. To understand the entire strategy formation process, the need for closer attention to the role of the *structural* and *strategic contexts* in the evolution of strategic issues is highlighted (Shepherd & Rudd, 2014). Therefore, the literature was inspected on a priori conceptual elements specifying the structural and strategic contexts of the evolutionary perspective of strategy-making (Burgelman, 1983). Although the literature is not explicitly concerned with hospitals, the conceptual elements offer possibilities to learn about how both contexts affect the evolution of strategic issues therein.

Overall, the outlined literature reveals that the *structural context* is characterized by the distribution of decision authority and resources, and the existence of procedural and communication channels, while the *strategic context* is determined by the communication processes and political behavior of the strategic actors. Building on Burgelman's (Burgelman, 1983, 1991) process model of strategy-making, the two contexts function together as an internal selection mechanism. However, it remains vague exactly how they affect strategic issue selection. Furthermore, no prior empirical work has assessed which and how strategic issues are selected or elucidated the selection criteria. Does the structural context influence strategic issue selection to the same extent as the strategic context? Which criteria determine a selection decision and does the processing of strategic issues also affect their selection? This leads to the first research question of *how and why induced and autonomous strategic issues are selected in the strategy formation process.*

The effects of the strategic and structural contexts on the *variation* and *retention* of strategic issues are also unexplored. It remains unclear whether the aforementioned structural and strategic characteristics only affect strategic issue selection or also influence the other evolution phases. Furthermore, the potential interrelation between both contexts is also overlooked by current research. This leads to the second research question of *how and why the structural and strategic contexts influence the evolution of strategic issues.*

METHOD

Embedded, Longitudinal Single Case Study Approach

Understanding strategy formation as neither the exclusive responsibility of the board of executives nor only a bottom-up emergent event, this study focuses on the evolution of both induced strategic issues from the executive board and autonomous strategic issues from medical professionals. Researching strategic issues' evolution is temporally sensitive, and the manifestation of such issues in the strategic agenda takes time; therefore, a *longitudinal*, *single case-study approach* was applied (Yin, 2014). A case study aims to understand the dynamics present within a single setting, and is especially apt to investigate a phenomenon in a real-life context that is complex and little understood (Eisenhardt, 1989; Yin, 2014). Supporting this, scholars recognize that qualitative research is especially useful to better understand the dynamics of strategic decision-making and the role of medical professionals (Ferlie, Fitzgerald, McGivern, Dopson, & Bennett, 2011). Since the final strategic agenda may comprise both induced (deliberate) and autonomous (emergent) strategies, a single case-study allows these different facets to be distinguished and provides rich and insightful data on the complex process of strategy formation (Barnes, 2001). Further, since strategy formation "decision processes are best viewed through the lens of issues" (Ocasio & Joseph, 2005, p. 42), an *embedded case study design* was applied, with strategic issues as embedded units of analysis. To explore the

evolution of strategic issues in hospitals, a two-year time frame was selected, thereby providing rich data from which theory can be extended (Yin, 2014).

Case Selection Rationale

For theoretical reasons, purposeful sampling was conducted. Hospitals are particularly fruitful to study the evolution of strategic issues. Due to their external and internal constraints, the lack of resources, the heterogeneity of professions, and the barriers to coordination, hospitals are regarded as typical forms of complex organizations with specific strategic orientation. This study offers an opportunity to empirically investigate the integration of medical and management expertise in strategy formation and track the entire evolution process of strategic issues in a hospital group.

Research Setting

In Germany, three different ownership types of hospitals exist. Beside *for-profit hospitals* that are largely comprised of hospital chains, there is a long tradition of *non-profit hospitals* run by charitable organizations including churches. The majority of all beds is provided by *public hospitals* that are owned by municipalities, regional districts or the German federal states.

The research setting is one of the biggest public hospital groups in Germany, serving a region of about 1.2 million people. It became a limited company in 2005, but is still fully owned by the federal state. It comprises 12 sites, and employs approximately 8,500 staff members. Furthermore, it provides 32,000 beds and admits more than 215,000 patients annually. Like many other public hospital groups, it is affected by tense competition situation in the healthcare sector. To stay competitive and to increase revenues while reducing costs, the executive board established seven strategy committees within the organization, called *medical centers.* The medical centers consolidate the group's medical departments, and the head physicians from each of the 12 clinics were appointed to participate. Furthermore, one physician was appointed as the managing director of each center, and together with one member of the executive board,

the members of each medical center meet regularly. The decentralized structure of the medical centers should encourage collaboration between medical experts, thereby counteracting the culture of individual professionalism and "silo" behavior (Bate, 2000; Currie et al., 2008). Specifically, the centers were introduced to facilitate operationalizing the induced strategic issues of the executive board. Furthermore, because the physicians were supposed to be close to the medical services, medical technologies, and patients, the medical centers were also requested to develop new autonomous strategic issues.

Hierarchically above the medical centers, a *management committee* was established, representing the organization as a whole. It comprises the executive board, the managing directors, the administrative managers, and the medical departments' head physicians. Its purpose is to integrate and manifest the center's activities throughout the organization. Overall, the research setting represents a typical German public hospital group in terms of size and organization.

Data Sources

First, *13 semi-structured interviews* were conducted with top administrative managers, executive board members, and the managing directors of each of the seven medical centers. During the interviews, strategic issue-specific documents were identified and assembled afterwards. The managing directors served as expert informants on the evolution of strategic issues, with unique knowledge about the medical centers' activities and as direct participants in each center meeting. Second, *37 non-participant observations* were conducted. With one exception, the research group was able to attend every meeting of the medical centers and the management committee, where data were collected on how issues have arisen and how they were addressed and negotiated. Whenever possible, meeting transcripts were typed verbatim. Additional field notes taken during and typed shortly after each meeting. Finally, *internal and external documents* were reviewed. External documents comprised government reports and

summaries of policy changes affecting health services in the region. Internal documents included the written mission and strategic orientation of the hospital, and charts presented in workshops and meetings. Furthermore, the official minutes of the medical centers and of the management committee meetings were reviewed, enabling the validation of observations. Overall, the variety of sources and the richness of the data provided a holistic picture of how induced and autonomous strategic issues evolved in the research setting, focusing on the effects of the structural and strategic contexts on strategy formation.

Data Analysis

Data analysis was conducted in two broad steps. In the first step, the interviews, observations, and documents were used to analyze the evolution of each individual induced or autonomous strategic issue. To reduce data without losing sight of the evidence chain, a narrative was written for each strategic issue, enabling its evolution to be reconstructed. Next, the primary data were coded to identify unique patterns in the evolution of each strategic issue. In this vein, a codebook was developed based on previously identified conceptual elements; however, it was remained open to unexpected events (in vivo) (Creswell, 2013).

In the second step, the strategic issues were compared and contrasted using analytical matrices, enabling the commonalities and idiosyncrasies to be identified. The analysis continued iteratively, moving between data, emerging patterns, and theoretical guideposts, until relationships in the evolution became apparent. Tracking the entire process of strategic issues' evolution made it possible to extend theory through a holistic conceptual model. Overall, the data analysis identified five different evolution paths for strategic issues, thus improving understanding of the effect of the structural and strategic contexts on strategic issues' evolution.

The methods were appropriate to establish the rigor of the case study (Yin, 2014). By involving multiple investigators in data collection and analysis, using multiple evidence sources, and providing extensive quotes from the data, the analysis was triangulated and the

construct validity improved. To increase the results' internal validity, the analytic technique of pattern matching was used, and empirical patterns in each strategic issue's evolution were compared with the theoretical patterns. In addition, plausible causal arguments were applied to the data, thereby demonstrating that conclusions were based on logical reasoning. Moreover, the embedded case study design enabled different strategic issues to be analyzed within one organization, thereby strengthening analytical generalization. Finally, reliability was established through developing a case study protocol and database in which the research procedures were carefully clarified and documented (Yin, 2014).

RESULTS

The following subsections evidence the influence of structural and strategic contexts on the evolution of strategic issues in the studied German hospital group, which combines medical and management expertise in strategy formation.

Evolution of Strategic Issues

In total, 19 strategic issues were identified in the hospital group's strategy formation process (see Table 1). Seven of these were induced strategic issues postulated top-down by the *executive board* and formulated in accordance with the organization's strategic intent.[1] For example, one induced strategic issue focused on the standardization and central purchase of medical consumables (I-1). By using the same equipment in all 12 clinics, consistently high treatment quality should be guaranteed and costs should decrease through volume discounts from suppliers. Furthermore, through standardization, the realization of another induced strategic issue should be facilitated: the establishment of an internal personnel pool (I-3). This issue was also introduced into the medical centers by the executive board, and focused on reducing

[1] The strategic intent of the hospital group emphasizes the "increase of revenues, reduction in personnel costs, reduction in material expenses, and structural changes in the process organization" (official strategy paper).

personnel costs. However, the data reveal of seven induced strategic issues, only four were selected. This represents a selection rate of 57%.

By contrast, 12 autonomous strategic issues were initiated by medical experts and emerged bottom-up within the medical centers. The medical centers played a key role in the variation of strategic issues because the medical expertise of all head physicians was bundled here. The autonomous strategic issues were mainly characterized by medical problems directly affecting the head physicians' work. One central issue was the optimization of structures and processes during surgery in order to shorten the time period between the start and end of the surgery (I-8). Another autonomous strategic issue was the enhancement of the temporarily low utilization of emergency rooms (I-17), as emergency care typically represents an enormous cost factor. In addition, many autonomous strategic issues concerned general improvement of the medical centers, such as expanding the performance spectrum (I-15) or intensifying marketing cooperation (I-13). However, the findings reveal that out of the 12 autonomous strategic issues, only two were selected (16.6%). Thus, although significantly more autonomous strategic issues emerged, more induced strategic issues were ultimately selected.

Insert Table 1 about here

Influence of the Structural Context

The data demonstrate that the hospital group's *structural context* influenced the evolution of strategic issues. First, the executive board did not give clear *task descriptions* to the managing directors, who consequently perceived themselves as largely passive coordinators of center meetings with *no decision authority*. They thus invested limited time in preparing for center meetings and did not feel responsible for compiling documents of the strategic issues. This was reinforced by the executive board's failure to engage in strategic planning and coordination activitie*s*, such as operationalizing goals and coordinating resources. Managing directors also

complained that issues needing elaboration by data of the controlling could not be advanced, as the data were not sufficiently provided by the administration: "*What we need are concrete numbers, data, and facts, so that we do not always remain vague."*

Second, the *procedural and communication* channels constrained strategic issues' development. For example, it remained vague who was responsible for pursuing strategic issues, since there were no rules on how to coordinate them beyond each medical center. A common saying in the meetings was: *"Somebody should work on that."* Furthermore, there were *no specified procedures* on how to systematically operationalize strategic issues, and there was *no rule* to determine whether a strategic issue discussed in a medical center should be pursued. Overall, on the effect of the *structural context* on strategic issues' evolution, deficient structural characteristics inhibited strategic issues from being systematically prepared and processed.

Influence of the Strategic Context

The data demonstrate that the hospital group's *strategic context* also influenced strategic issues' evolution. Specifically, significant differences in the communication processes were identified. Within the medical centers, most communication processes were characterized by *deconstructive confrontation* and *passive reporting*. Specifically, the previously described structural deficits resulted in the superficial preparation of strategic issues. By focusing excessively on irrelevant information, strategic issues were discussed on a trivial level and most actors jumped into strategic issues without any chance to transfer them into issues of relevance to the company. Because responsibilities for strategic issues were not transparent, high redundancy and repetition of themes became common. As one interviewee stated: "*Too many discussions, too few decisions.*" Furthermore, many strategic issues were neither specified nor systematically raised with relevant decision-makers. Consequently, they were selected less frequently by the executive board.

In contrast, a few strategic issues were characterized by *active* and *constructive communication processes,* through which they were deepened, critically analyzed, and integrated. In these cases, the actors were well-informed and prepared, and the associated opportunities and problem were analyzed over several meetings. This is demonstrated, for example, by the following discussion about the induced strategic issue (I-5):

X: "I have worked with the medical robot at different locations, and I think it will really improve the quality of treatment."

Z: "This investment only makes sense if growth rates of 10% can be achieved."

Y: "Our competitor currently employs four surgeons who bring them 250 more cases."

X: "We would then need more patients from outside."

However, constructive communication processes characterized the processing of not only induced strategic issues but also some autonomous strategic issues. As shown in the following dialogue about strategic issue of coding (I-9), problems were identified and solutions were discussed before finally being integrated across the medical departments:

X: "I had the idea of getting close to real-time coding."

Y: "And did you make it?"

X: "The idea was good, but unfortunately the implementation failed."

Z: "Couldn't we start by employing a coder for your hospital first and then let him gradually come into the other hospitals?"

X: "Yes, we could think about that."

Overall, the findings reveal that strategic issues developed through intensive communication processes, through which they were deepened and critically analyzed, were more likely to be selected in the strategy formation process. Therefore, the ways and frequency of actors' communication determine which strategic issues receive attention, and thus constitute an "*interactional selection criterion."*

However, strategic issues specified through intensive communication processes were not always selected**.** For example, in three cases (I-5 to I-7), despite active decision participation and deliberate issue diagnosis within the strategic committees, the executive board refused to

realize these strategic issues. This indicates the existence of another selection mechanism besides the "interactional selection criterion." It transpired that specific *"content-related selection criteria"* must also be fulfilled. The findings reveal that unless actors engaged in championing behavior, the strategic issue had no chance of selection. Specifically, concrete solutions for how the whole hospital group would benefit from the strategic issue had to be presented to the executive board. For example, the optimization of structures and processes during the surgery (I-8) was an autonomous strategic issue was bundled across each medical center and considered in light of the entire organization:

> *"Unfortunately, regarding the op-organization across all the centers, we have a utilization rate of 50%. Across Germany, the utilization is 60%, which means we have too much op capacity in our company that we do not use."*

Furthermore, to secure support from the executive board, strategic issues also had to be specified in terms of potential revenues and cost savings. As one interviewee stated:

> *"Money follows performance [...] specific themes have to be presented to the executive board and they have evaluated them economically. To have ideas is great, but if you cannot finance them, they are not be realized."*

A good example of a strategic issue that met the content-related criteria is the diabetic foot center (I-4). This induced strategic issue was presented in the management committee and then selected by the executive board:

> *"The establishment of the diabetic foot center will provide a significant competitive advantage for the entire organization, both in medical and economic terms. We expect an increase in profit of around 2-3 million euro."*

Overall, on the effect of the *strategic context* on strategic issues' evolution, communication processes constitute an "interactional selection criterion". Additionally, specific content-related

criteria must also be fulfilled to be eligible for selection. Here, successful championing and the demonstration of company-wide strategic relevance proved to be decisive.

Evolution Paths of Strategic Issues

The empirical findings so far improve understanding of the effect of the structural and strategic contexts on strategic issues' evolution. Six of the 19 strategic issues identified were selected and retained in the strategic agenda, thereby securing a proportion of limited organizational resources. Five different development paths of strategic issues were identified (see Figure 1).

Insert Figure 1 about here

Issue Operationalization

As Figure 1 shows, the strategic issues that followed this evolution path were initiated top-down by the executive board (induced strategic issues) and introduced directly within the medical centers. Their processing was characterized by active and constructive communication processes, allowing these issues to be specified and systematically returned via the management committee to the executive board (interactional selection criterion ✓).[2] Furthermore, this type of issues also met the content-related selection criteria, resulting in their selection and subsequent retention in the strategic agenda. The strategic issues *standards* (I-1) and *nutritional management* (I-2) could be assigned to this development path.

Issue Statement

These strategic issues were also initiated by the executive board and directly discussed in the medical centers. In contrast to the previous path, however, these strategic issues were not processed through deliberate communication processes but rather by passive reporting

[2] In Figure 1, this is displayed with a continuous arrow (—→).

(interactional selection criterion ☒).[3] Although these issues were considered in light of the entire organization, and potential revenues and cost savings were specified (content-related selection criteria ✓), the issues were not further specified due to inadequate communication processes. Furthermore, they were not systematically returned via the management committee to the executive board. Consequently, these strategic issues stagnated and were retained in the agenda at the originally formulated generalized level. As Figure 1 shows, two strategic issues (I-3 and I-4) followed the second evolution path.

Issue Disappearance

The third evolution path describes strategic issues initiated by the executive board, further processed by intensive and active communication processes (interactional selection criterion ✓), but not ultimately selected by the board (I-4 to I-6). These strategic issues were not retained in the strategic agenda because they did not meet the content-related selection criteria ☒. A r*ealization gap* occurred at the executive board level. This suggests that the content-related selection criteria are a necessary prerequisite for strategic issues' successful evolution.

New Issue

Strategic issues that followed the fourth evolution path were developed in the medical centers (autonomous strategic issues). In the first step, these issues were systematically processed via the management committee to the executive board (interactional selection criterion ✓). Because the executive board was previously unaware of these issues, they were then passed back to the medical centers for further discussion. Finally, after being processed to the executive board again with their content-related criteria now fulfilled (content-related selection criteria ✓), these strategic issues were selected and finally retained as new issues in the strategic agenda (I-8 and I-9).

[3] In Figure 1, this is displayed with a discontinuous arrow (– – →).

Unmentioned Issues

The final evolution path describes strategic issues that were not mentioned in the strategic agenda. In contrast to the "Issue Disappearance" path, the issues on this path emerged bottom-up and were developed by the head physicians in the medical centers. In total, 10 autonomous strategic issues (I-10 to I-19) can be assigned to this evolution path, which is the majority of issues identified in this case study. As shown in Figure 1, the processing of these strategic issues was characterized by passive reporting and unsystematic processing (interactional selection criterion ☒). Some of these cases fulfilled the content-related criteria – e.g., increasing profits through a better occupancy rate of the emergency rooms (I-17) was clearly defined – but were still not selected by the management. Since a *realization gap* had already occurred at the level of the medical centers or management committee, these issues were not pursued further.

Overall, of the five evolution paths, only three lead to strategic issues being retained in the strategic agenda.

DISCUSSION AND CONCLUSION

This study aimed to investigate the evolution of strategic issues in hospitals. Most prior studies give only partial perspectives on the strategy formation process (Gavetti & Rivkin, 2007; Shortell et al., 1985), and scholars have called for insight into the interfaces between the variation, selection, and retention of strategic issues, with closer focus on the role of the *structural* and *strategic contexts* (Elbanna & Child, 2007; Shepherd & Rudd, 2014). This study heeds this call, making three contributions overall.

Insert Figure 2 about here

First, it extends the process model of strategy-making (Burgelman, 1983, 1991) by introducing the "*interactional selection criterion*" and "*content-related selection criteria*." As

Figure 2 shows, these two concepts are located at the interfaces between the evolution phases and give reasons for both why strategic issues move/do not move from the variation to the selection phase *(*interactional selection criterion) and why they are retained/not retained in the strategic agenda (content-related selection criteria). Specifically, the study reveals that the processing of strategic issues constitutes an *interactional selection criterion*. This finding informs the debate on the unclear role of communication in developing new strategic agendas and generating strategic change (Clarke, 2013; Ocasio, Laamanen, & Vaara, 2018). The data reveal also that fulfilling specific *content-related criteria* is mandatory for a strategic issue's selection and retention. In line with Mintzberg and McHugh (1985), the findings indicate that strategic issues have the best chance of being selected if they are integrated at the organizational level. This adds to the literature (Canales, 2015) by demonstrating that strategic issues must also be specified in terms of potential revenues and cost savings. However, it criticizes previous studies (Andersen & Jakobsen, 2011) suggesting that private hospitals try harder to increase the income/costs ratio than do public hospitals (Guerrini, Romano, Campedelli, Moggi, & Leardini, 2018).

In addition, with regard to the two selection mechanisms, differences between induced and autonomous strategic issues can be identified. The study reveals that autonomous strategic issues are only selected if all selection criteria (interactional and content-related) are met. Moreover, autonomous strategic issues that do not meet the interactional selection criterion are never even considered by the executive board as regards the content-related criteria. Due to the lack of communication processes, these issues are not specified and systematically processed to relevant decision-makers ("Unmentioned Issues"). This corroborates the prior finding that autonomous strategic issues need more structural and interaction support (Ridder & Schrader, 2017). In contrast, induced strategic issues are selected even if the interactional selection criterion is not fulfilled. However, their deficient communication processes confine them to an

"Issue Statement" in the new strategic agenda. This finding indicates that the selection of strategic issues is a two-stage mechanism (first the interactional selection criterion, then the content-related selection criteria). In this respect, the content-related selection criteria are a necessary prerequisite for successful selection.

Second, this study refines the process model of strategy-making (Burgelman, 1983, 1991) by giving detailed insight into the characteristics of the structural and strategic contexts, explaining how and why both contexts not only affect the selection of strategic issues but also their variation and retention. Thereby, this study addresses the recent call by Veronesi et al. (2015), to give greater attention to wider organizational conditions that shape the nature and impact of clinical participation in strategy formation processes Specifically, the study indicates that the *structural context* affects the variation of both induced and autonomous strategic issues (see Figure 2). The results accord with the prior finding that a decentralized organizational structure facilitates the formation of autonomous strategic issues. However, they contrast with Burgelman's (1983) claim that the structural context only affects the variation of induced strategic issues. In the studied hospital group, the deficient structural context – in terms of unclear tasks, roles, and criteria, and lack of resources – caused members of the medical centers to feel no responsibility for systematically developing autonomous strategic issues. Specifically, autonomous strategic issues are often characterized by day-to-day problems and introduced according to the strategic actors own importance. Consequently, the number of autonomous issues exceeded the number of induced strategic issues. This finding supports the suggestions in prior work that structural characteristics shape the strategy formation process and limited resources and coordination hinders effective strategy formation (Huxham & Vangen, 2000; Uhl-Bien, Marion, & McKelvey, 2007).

The study also refines understanding of the *strategic context* by specifying its components and determining its influence on the strategy process. The findings indicate that the strategic

context is characterized by different forms of decision participation. In particular, the data reveal that deconstructive confrontation and passive reporting prevent strategic issues from being specified and systematically processed to relevant decision-makers. This corroborates findings that the ways and frequency of actors' communication are significant in the strategy formation process (Lavarda et al., 2010; Raes et al., 2011). However, it contrasts with Burgelman's (1983) claim that the strategic context only weakly influences autonomous strategic behavior.

Furthermore, the study provides insight into the *retention* of strategic issues. As Figure 2 shows, five evolution paths of strategic issues can be identified. The study reveals that four induced strategic issues were retained as deliberate strategies in the strategic agenda: two through the "Issue Operationalization" path and two through the "Issue Statement" path. In contrast, only two autonomous strategic issues were retained as emergent strategies, both through the "New Issue" path. Thus, twice as many induced strategic issues were retained. This corroborates the prior finding that a strategy's comprehensiveness can by negatively afected by the absence of purposeful resource coordination and the failure to structure the strategy formation process via specified guidelines (Bisbe & Malagueño, 2012). However, it contrasts with Mintzberg's (2012) finding that a hospital's strategy is largely the sum total of the many ventures of its professional staff. Specifically, this study indicates that strategic issue retention is dominated by the institutionalization of induced strategic issues from the executive board. Moreover, the executive board focuses mainly on the financial viability of the hospital group and is critical of issues that are difficult to predict in terms of potential revenues. These findings are in line with research suggesting that greater formal autonomy of hospital boards may not facilitate greater clinical influence in strategy formation processes (Edmonstone, 2009). Furthermore, this resonates with the trend in German hospital management to treat medical

professionals as medical experts without financial responsibility and decision strategic decision-making authority (Bode & Maerker, 2014).

The final pattern revealed by the study is that the *structural context* and *strategic context* interact (see Figure 2). Whereas Mintzberg and McHugh (1985) state that the strategy formation process can be overmanaged, and that patterns should be left to emerge, this study's findings indicate the opposite. A deficient structural context leads to deficient communication processes, promoting the introduction of vary many autonomous strategic issues. Therefore, contrary to Burgelman (1983), this study reveals that the structural context strongly influences the strategic context. As Figure 2 shows, the results also indicate that the strategic context affects the structural context. Specifically, deconstructive communication processes prevent the organizational structure from being used in the way initially induced. Specifically, medical expertise and management expertise are not successfully combined, and mutually exclusive knowledge is not used to consider strategic issues in terms of the whole hospital. This finding adds to the process model of strategy-making (Burgelman, 1983, 1991) that neglects a direct effect of the strategic context on the structural context (Burgelman, 1983).

Third, the study simultaneously tracks the evolution of induced and autonomous strategic issues. Although strategy formation research acknowledges that the strategic agenda has two components (induced and autonomous), most prior studies either ignore one or the other, or treat them separately (Canales, 2015; Ocasio, 2011). In viewing strategy formation as an intra-organizational process in which strategic initiatives emerge in patterned ways and compete for limited organizational resources, mutual influence between induced and autonomous issues is indicated. The study demonstrates how induced and autonomous strategic issues evolve over time, and how they are integrated into the strategic agenda. In this respect, the conceptual model provides a holistic representation of strategy issues' evolution, thereby minimizing the trend towards framework proliferation (Hutzschenreuter & Kleindienst, 2006).

Overall, this study reveals that public hospitals in Germany are in strong competition for cases and patient. They have adopt management tools – e.g. standardization, process optimisation – from the market-driven economic environment that have implications similar to NPM (Dent, 2005). Furthermore, the introduction of the new funding model in 2004 (based on Diagnosis Related Groups) increased the pressure to provide more efficient and cost-saving health services and hospitals face a higher risk of closure or takeovers (Ridder, Doege, & Martini, 2007). Processes of organizational restructuring often go along with changes in the legal form of the hospital. The public hospital group under study also became a limited company in 2015. In 2016 almost 57% of German public hospitals had adopted a private legal form, for example, a limited corporation. This grants hospitals enhanced freedom to strategic decisions and can be compared to the move to "Foundation Trust status" in the NHS.

Surprisingly, this study indicates that mainly internal factors – i.e. the configuration of the structural and strategic context of the public hospital group – have a decisive effect on the strategy formation processes. This contrasts with previous studies showing that strategic decisions are embedded in both the inner context (e.g. structural factors) and the outer context (e.g. competitive factors) of the organization (Pettigrew, 1992). However, the high relevance of the internal characteristics can be explained by the special context of the German hospital sector. The international comparison shows that the German health system is different from, for example, the NHS in the UK. In contrast to other countries, German hospitals have a high degree of autonomy together with a strong commitment to self-governance. As a consequence, governments cannot regulate the management of hospitals directly. Underpinned by the principle of subsidiarity the hospital management can decide independently what it considers to be strategically relevant. The strategy formation process is less influenced by external factors and the local autonomy explains why very different topics (see Table 1) were considered strategically relevant by the hospital management

REFERENCES

Alexander, J. A., D'Aunno, T. A., & Succi, M. J. (1996). Determinants of rural hospital conversion: A model of profound organizational change. *Medical Care*, *34*(1), 29–43.

Andersen, L. B., & Jakobsen, M. (2011). Does ownership matter for the provision of professionalized services? Hip operations at publicly and privately owned clinics in Denmark. *Public Administration*, *89*(3), 956–974. doi:10.1111/j.1467-9299.2010.01881.x

Andersen, T. J. (2004). Integrating the strategy formation process. *European Management Journal*, *22*(3), 263–272. doi:10.1016/j.emj.2004.04.008

Ashford, S. J., Rothbard, N. P., Piderit, S. K., & Dutton, J. E. (1998). Out on a limb: The role of context and impression management in selling gender-equity issues. *Administrative Science Quarterly*, *43*(1), 23–57.

Baer, M., Dirks, K. T., & Nickerson, J. A. (2013). Microfoundations of strategic problem formulation. *Strategic Management Journal*, *34*(2), 197–214. doi:10.1002/smj.2004

Baker, G. R., & Denis, J.-L. (2011). Medical leadership in health care systems: From professional authority to organizational leadership. *Public Money & Management*, *31*(5), 355–362. doi:10.1080/09540962.2011.598349

Barnes, D. (2001). Research methods for the empirical investigation of the process of formation of operations strategy. *International Journal of Operations & Production Management*, *21*(8), 1076–1095. doi:10.1108/EUM0000000005586

Bate, P. (2000). Changing the culture of a hospital: From hierarchy to networked community. *Public Administration*, *78*(3), 485–512. doi:10.1111/1467-9299.00215

Bisbe, J., & Malagueño, R. (2012). Using strategic performance measurement systems for strategy formulation: Does it work in dynamic environments? *Management Accounting Research*, *23*(4), 296–311. doi:10.1016/j.mar.2012.05.002

Bode, I., & Maerker, M. (2014). Management in medicine or medics in management?: The changing role of doctors in German hospitals. *International Journal of Public Sector Management*, *27*(5), 395–405. doi:10.1108/IJPSM-06-2012-0068

Burgelman, R. A. (1983). A model of the interaction of strategic behavior, corporate context, and the concept of strategy. *Academy of Management Review*, *8*(1), 61–70. doi:10.5465/AMR.1983.4287661

Burgelman, R. A. (1991). Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research. *Organization Science*, *2*(3), 239–262.

Burgess, N., Strauss, K., Currie, G., & Wood, G. (2015). Organizational ambidexterity and the hybrid middle manager: The Case of Patient Safety in UK Hospitals. *Human Resource Management*, *54*(S1), s87-s109. doi:10.1002/hrm.21725

Canales, J. I. (2015). Sources of selection in strategy making. *Journal of Management Studies*, *52*(1), 1–31. doi:10.1111/joms.12101

Canet-Giner, M. T., Fernández-Guerrero, R., & Peris-Ortiz, M. (2010). Changing the strategy formation process in a service cooperative. *Journal of Organizational Change Management*, *23*(4), 435–452. doi:10.1108/09534811011055412

Chreim, S., & MacNaughton, K. (2016). Distributed leadership in health care teams: Constellation role distribution and leadership practices. *Health Care Management Review*, *41*(3), 200–212.

Clarke, N. (2013). Model of complexity leadership development. *Human Resource Development International*, *16*(2), 135–150. doi:10.1080/13678868.2012.756155

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks: Sage Publications.

Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *Academy of Management Review*, *24*(3), 522–537.

Currie, G., & Lockett, A. (2011). Distributing leadership in health and social care: Concertive, conjoint or collective? *International Journal of Management Reviews*, *13*(3), 286–300. doi:10.1111/j.1468-2370.2011.00308.x

Currie, G., Koteyko, N., & Nerlich, B. (2009). The dynamics of professions and development of new roles in public service organizations: The case of modern matrons in the Englisch NHS. *Public Administration*, *87*(2), 295–311. doi:10.1111/j.1467-9299.2009.01755.x

Currie, G., Waring, J., & Finn, R. (2008). The limits of knowledge management for UK public services modernization: The case of patient safety and service quality. *Public Administration*, *86*(2), 363–385. doi:10.1111/j.1467-9299.2007.00705.x

Denis, J.-L., Lamothe, L., & Langley, A. (2001). The dynamics of collective leadership and strategic change in pluralistic organizations. *Academy of Management Journal*, *44*(4), 809–837. doi:10.2307/3069417

Dent, M., Howorth, C., Mueller, F., & Preuschoft, C. (2004). Archetype transition in the German health service? The attempted modernization of hospitals in a North German state. *Public Administration*, *82*(3), 727–742. doi:10.1111/j.0033-3298.2004.00416.x

Dent, M. (2005). Post-New Public Management in public sector hospitals?: The UK, Germany and Italy. *Policy and Politics*, *33*(4), 623–636. doi:10.1332/030557305774329208

Dutton, J. E., Ashford, S. J., O'Neill, R. M., & Lawrence, K. A. (2001). Moves that matter: Issue selling and organizational change. *Academy of Management Journal*, *44*(4), 716–736.

Dutton, J. E., & Dukerich, J. M. (1991). Keeping an eye on the mirror: Image and identity in organizational adaptation. *Academy of Management Journal*, *34*(3), 517–554. doi:10.5465/256405

Edmonstone, J. (2009). Clinical leadership: The elephant in the room. *The International Journal of Health Planning and Management*, *24*(4), 290–305. doi:10.1002/hpm.959

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, *14*(4), 532–550.

Elbanna, S., & Child, J. (2007). The influence of decision, environmental and firm characteristics on the rationality of strategic decision-making. *Journal of Management Studies*, *44*(4), 561–591. doi:10.1111/j.1467-6486.2006.00670.x

Fanelli, S., Lanza, G., & Zangrandi, A. (2017). Management tools for quality performance improvement in Italian hospitals. *International Journal of Public Administration*, *40*(10), 808–819. doi:10.1080/01900692.2017.1280821

Ferlie, E., Fitzgerald, L., McGivern, G., Dopson, S.U.E., & Bennett, C. (2011). Public policy networks and wicked problems: A nascent solution? *Public Administration*, *89*(2), 307–324. doi:10.1111/j.1467-9299.2010.01896.x

Ford-Eickhoff, K., Plowman, D. A., & McDaniel, R. R. (2011). Hospital boards and hospital strategic focus. *Health Care Management Review*, *36*(2), 145–154. doi:10.1097/HMR.0b013e3182099f6e

Gavetti, G., & Rivkin, J. W. (2007). On the origin of strategy: Action and cognition over time. *Organization Science*, *18*(3), 420–439. doi:10.1287/orsc.1070.0282

Guerrini, A., Romano, G., Campedelli, B., Moggi, S., & Leardini, C. (2018). Public vs. private in hospital efficiency: Exploring determinants in a competitive environment. *International Journal of Public Administration*, *41*(3), 181–189. doi:10.1080/01900692.2016.1256892

Hafsi, T., & Thomas, H. (2005). The field of strategy. *European Management Journal*, *23*(5), 507–519. doi:10.1016/j.emj.2005.09.006

Huff, A. S., & Reger, R. K. (1987). A review of strategic process research. *Journal of Management*, *13*(2), 211–236.

Hutzschenreuter, T., & Kleindienst, I. (2006). Strategy-process research: What have we learned and what is still to be explored. *Journal of Management*, *32*(5), 673–720. doi:10.1177/0149206306291485

Huxham, C., & Vangen, S. (2000). Leadership in the shaping and implementation of collaboration agendas: How things happen in a (not quite) joined-up world. *Academy of Management Journal*, *43*(6), 1159–1175. doi:10.2307/1556343

Johansson, R., & Borell, K. (1999). Central steering and local networks: Old-age care in Sweden. *Public Administration*, *77*(3), 585–598. doi:10.1111/1467-9299.00169

Kim, Y. H., Sting, F. J., & Loch, C. H. (2014). Top-down, bottom-up, or both? Toward an integrative perspective on operations strategy formation. *Journal of Operations Management*, *32*(7-8), 462–474. doi:10.1016/j.jom.2014.09.005

Kitchener, M. (1998). Quasi-market transformation: An institutionalist approach to change in UK hospitals. *Public Administration*, *76*(1), 37–95.

Lavarda, R. A. B., Canet-Giner, M. T., & Peris-Bonet, F. J. (2010). How middle managers contribute to strategy formation process: Connection of strategy processes and strategy practices. *Revista de Administração de Empresas*, *50*(4), 358–370.

Llewellyn, S. (2001). "Two-way windows": Clinicians as medical managers. *Organization Studies*, *22*(4), 593–623.

McDaniel, R. R., & Driebe, D. J. (2001). Complexity science and health care management. In J. D. Blair, M. D. Fottler, & G. T. Savage (Eds.), *Advances in Health Care Management* (2nd ed., pp. 11–36). Stamford: CT:JAI.

McGivern, G., Currie, G., Ferlie, E., Fitzgerald, L., & Waring, J. (2015). Hybrid manager-professional's identity work: The maintenance and hybridization of medical professionalism in managerial contexts. *Public Administration*, *93*(2), 412–432. doi:10.1111/padm.12119

Mintzberg, H. (2012). Managing the myths of health care. *World Hospitals and Health Services*, *48*(3), 4–7.

Mintzberg, H., & Waters, J. A. (1982). Tracking strategy in an entrepreneurial firm. *The Academy of Management Journal*, *25*(3), 465–499.

Mintzberg, H., & McHugh, A. (1985). Strategy formation in an adhocracy. *Administrative Science Quarterly*, *30*(2), 160–197. doi:10.2307/2393104

Mirabeau, L., & Maguire, S. (2014). From autonomous strategic behavior to emergent strategy. *Strategic Management Journal*, *35*(8), 1202–1229. doi:10.1002/smj.2149

Noda, T., & Bower, J. L. (1996). Strategy making as iterated processes of resource allocation. *Strategic Management Journal*, *17*(S1), 159–192.

Noordegraaf, M. (2011). Risky business: How professionals and professional fields (must) deal with organizational issues. *Organization Studies*, *32*(10), 1349–1371. doi:10.1177/0170840611416748

Ocasio, W. (1997). Towards an attention-based view of the firm. *Strategic Management Journal*, *18*(S1), 187–206.

Ocasio, W., & Joseph, J. (2005). An attention-based theory of strategy formulation: Linking micro- and macroperspectives in strategy processes. In G. Szulanski, J. Porac, & Y. Doz (Eds.), *Advances in Strategic Management: Volume 22. Strategy process* (pp. 39–62). Oxford: Elsevier Ltd.

Ocasio, W. P. (2011). Attention to attention. *Organization Science*, *22*(5), 1286–1296. doi:10.1287/orsc.1100.0602

Ocasio, W., Laamanen, T., & Vaara, E. (2018). Communication and attention dynamics: An attention-based view of strategic change. *Strategic Management Journal*, *39*(1), 155–167. doi:10.1002/smj.2702

Pascale, R. T. (1984). Perspectives on strategy: The real story behind Honda's success. *California Management Review*, *26*(3), 47–72. doi:10.2307/41165080

Pettigrew, A. M. (1992). The character and significance of strategy process research. *Strategic Management Journal*, *13*(S2), 5–16. doi:10.1002/smj.4250130903

Plsek, P. E., & Wilson, T. (2001). Complexity, leadership, and management in health care organisations. *British Medical Journal*. (323), 746–749.

Raes, A. M. L., Heijltjes, M. G., Glunk, U., & Roe, R. A. (2011). The interface of the top management team and middle managers: A process model. *Academy of Management Review*, *36*(1), 102–126. doi:10.5465/AMR.2011.55662566

Ridder, H.-G., & Schrader, J. S. (2017). Processing of intended and unintended strategic issues and integration into the strategic agenda. *Health Care Management Review*, *Publish Ahead of Print*.

Ridder, H.-G., Doege, V., & Martini, S. (2007). Differences in the implementation of diagnosis-related groups across clinical departments: A German hospital case study. *Health Services Research*, *42*(6 Pt 1), 2120–2139.

Salfeld, R., Hehner, S., & Wichels, R. (2009). *Modernes Krankenhausmanagement - Konzepte und Lösungen*. Berlin: Springer-Verlag.

Santiago, R., Carvalho, T., & Sousa, S. (2015). NPM reforms and professionals in health and higher education in Portugal. *International Journal of Public Administration*, *38*(11), 757–768. doi:10.1080/01900692.2014.979199

Shepherd, N. G., & Rudd, J. M. (2014). The influence of context on the strategic decision-making process: A review of the literature. *International Journal of Management Reviews*, *16*(3), 340–364. doi:10.1111/ijmr.12023

Shortell, S. M., Morrison, M. A., & Robbins, S. (1985). Strategy making in health care organizations: A framework and agenda for research. *Medical Care Review*, *42*(2), 219–266.

Sminia, H. (2005). Strategy formation as layered discussion. *Scandinavian Journal of Management*, *21*(3), 267–291. doi:10.1016/j.scaman.2004.09.002

Sminia, H. (2009). Process research in strategy formation: Theory, methodology and relevance. *International Journal of Management Reviews*, *11*(1), 97–125. doi:10.1111/j.1468-2370.2008.00253.x

Tiemann, O., & Schreyoegg, J. (2012). Changes in hospital efficiency after privatization. *Health Care Management Science*, *15*(4), 310–326. doi:10.1007/s10729-012-9193-z

Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly*, *18*(4), 298–318.

Veronesi, G., Kirkpatrick, I., & Altanlar, A. (2015). Clinical leadership and the changing governance of public hospitals: Implications for patien experience. *Public Administration*, *93*(4, SI), 1031–1048. doi:10.1111/padm.12183

Weick, K. E. (1979). The social psychology of organizing. *Columbus, OH: McGraw-Hill Humanities*.

Wells, R., Lee, S. Y.D., McClure, J., Baronner, L., & Davis, L. (2004). Strategy development in small hospitals: Stakeholder management in constrained circumstances. *Health Care Management Review*, *29*(3), 218–228.

Yin, R. K. (2014). *Case study research: Design and methods*. Thousand Oaks: Sage Publications.

Zimmerman, B., Lindberg, C., & Plsek, P. E. (1998). *Edgeware: Insights from complexity science for health care leaders*. Irving: VHA.

.

Table 1: Description of Strategic Issues

No.	Strategic Issue	Issue Description	Source of Origin
1	Standards	Standardization and central purchase of medical consumables, e.g., staples, suturing equipment, suturing material; surgery sieves, etc.	Induced strategic issues from the executive board
2	Nutritional management	Development and implementation of a screening standard for the systematic detection of malnutrition and undernourishment at each site	
3	Employee pool	Establishment of an internal personnel pool to deal with surpluses and requirements of employees	
4	Diabetic foot center	Cooperation of different medical disciplines in a diabetic foot center to ensure the best medical treatment of the diabetic foot syndrome	
5	Purchase of a new medical robot	Acquisition of a new medical robot which can be used during surgeries in different medical departments	
6	Surgery-cooperation	Cooperation with registered physicians who can use the hospital's operating rooms	
7	Implementation of service packages	Improvement of service quality through better-equipped hospital-, reception-, and delivery-rooms	
8	Op-management	Optimization of structures and processes during the surgery. Aim of reaching an “incision-suture time” of 60% compared to whole operating time	Autonomous strategic issues from the head physicians in the medical centers
9	Coding	Coding of diagnoses and procedures according to the medical classifications. Introduction of real-time coding	
10	Bed management	Implementation of a program for a coordinated management of bed occupancy	
11	Interface problems	Improvement of the cooperation between the medical departments	
12	Process optimizing	Implementation of central software to coordinate events and time limits	
13	Marketing cooperation	Improvement of the uniform image. Creation of new information material for patients	
14	Referring physicians	Systematic contacting of the referring physicians to ensure their long-term commitment	
15	Expansion of the performance spectrum	Offering of new treatment practices based on the state of the art	
16	Ward management	Dwell time control through a shortening of diagnostic and therapeutic processes	
17	Emergency room	Realization of structural changes in the emergency room in order to reduce costs	
18	Development of the medical center	Improvement of the internal processes in the medical center	
19	Internal cooperation	Profitability review regarding the foundation of new health centers	

Figure 1: Evolution Paths of Strategic Issues

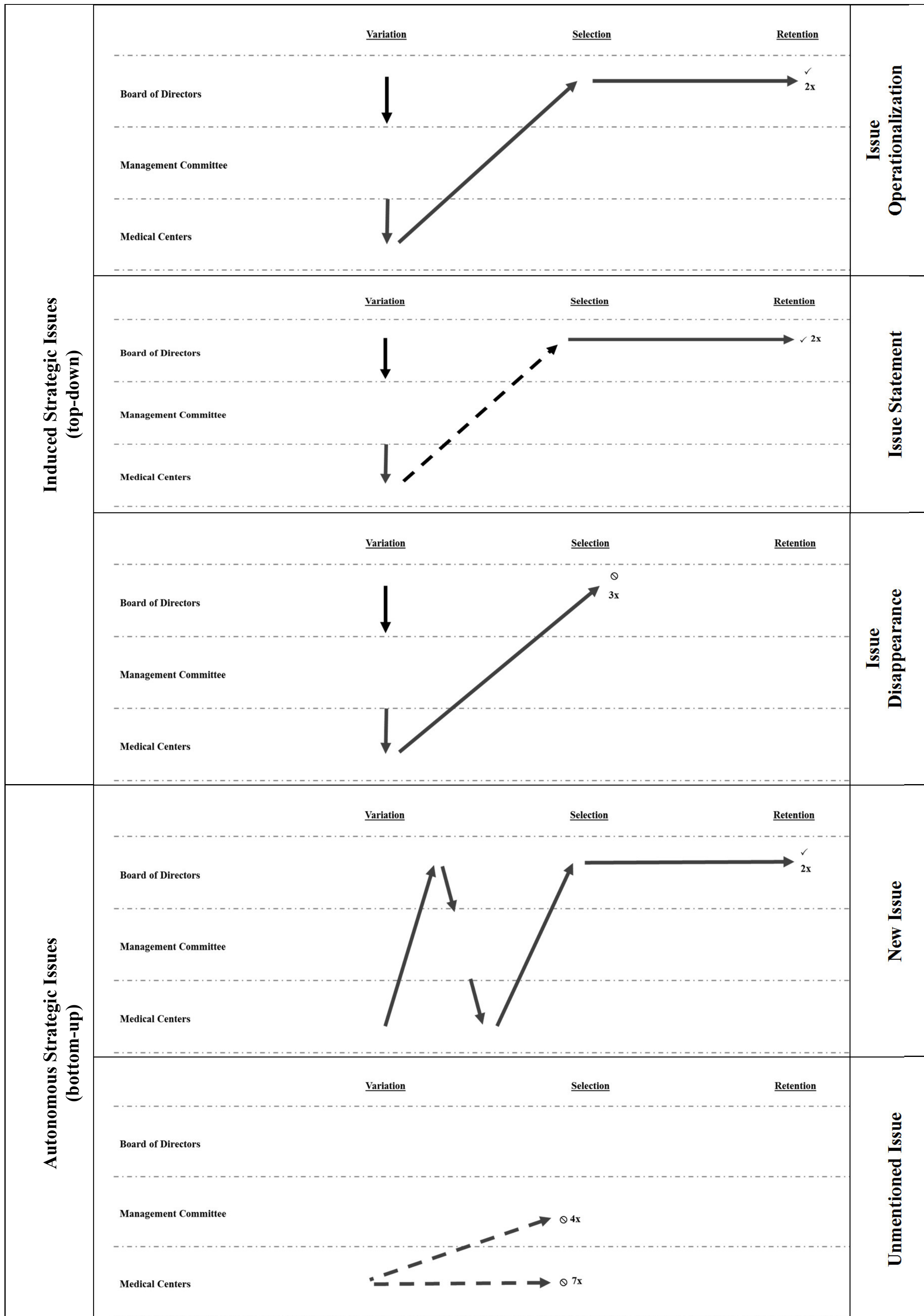
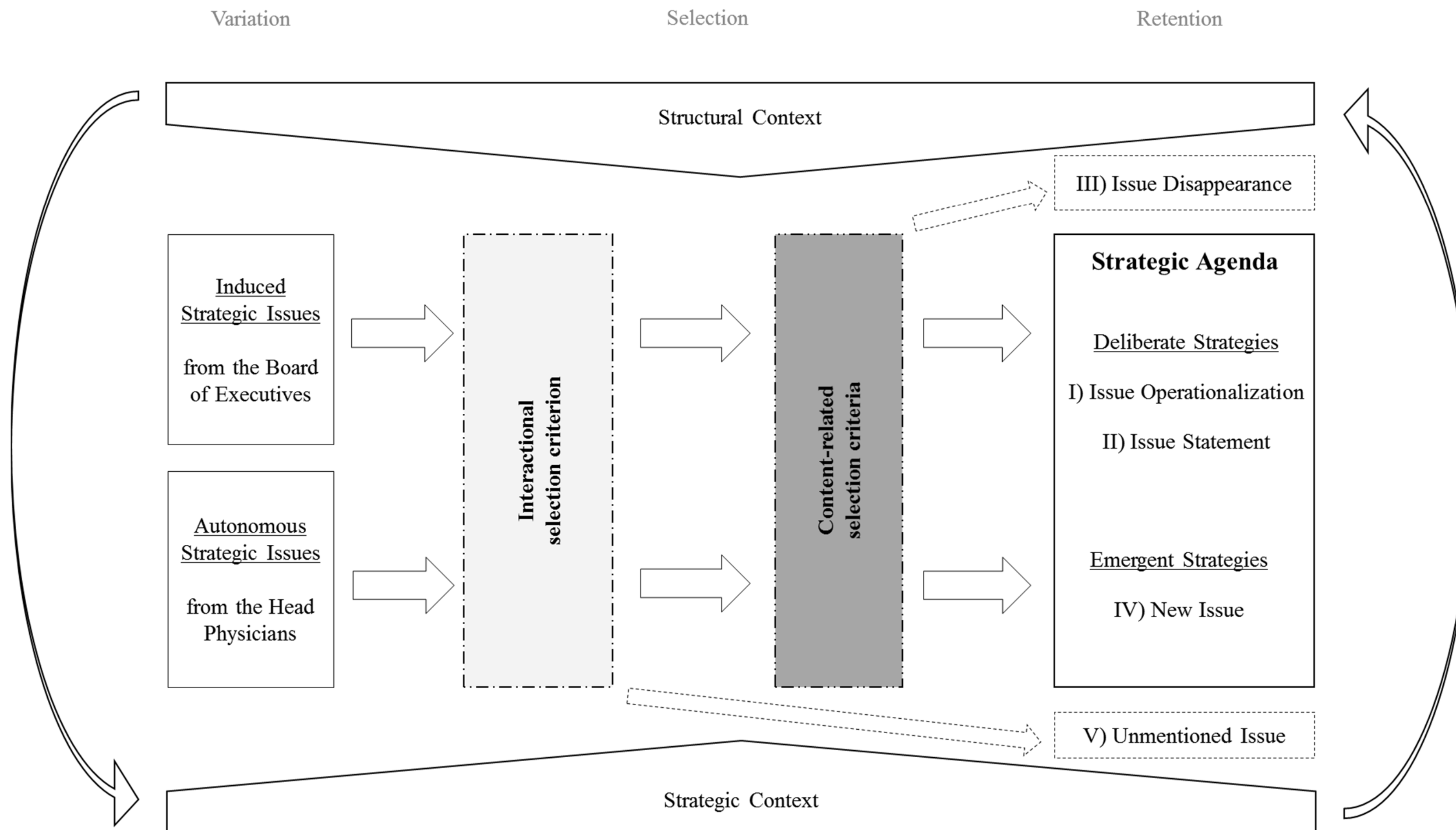


Figure 2: Model of the Evolution of Strategic Issues in Hospitals



Paper 4

Strategic Collaboration between Management and Medical Professionals – An Elaboration of the Theory of Strategy Formation in Hospitals

Schrader, J. S.

Submitted to the

78th Annual Meeting of the Academy of Management

Strategic Collaboration Between Management and Medical Professionals – An Elaboration of the Theory of Strategy Formation in Hospitals

ABSTRACT

This article investigates the collaboration between management and medical professionals in strategy formation. Specifically, the empirical study focuses on how intended and unintended strategic issues emerge in hospitals, how they are processed and, finally, how they are integrated into the strategic agenda. It is a sequential replication of a previous case study in order to elaborate the nascent theory of strategy formation in hospitals in a comparable setting. This study makes several contributions to the literature: First, it validates the interplay between structure and interaction, a tentative relationship found in the previous study. Furthermore, the study refines the construct of interaction by elaborating the transparency in decision-making and the use of informal procedures as supportive factors in strategy formation. Second, this study extends the nascent theory of strategy formation by identifying the organizational spirit as another relevant construct in the strategy formation process. Third, this study contributes by a specification of the mechanism of strategy formation. More precisely, the interplay of structure, interaction, and organizational spirit determines how strategy formation unfolds and is conceptualized as the strategy making capability of a hospital.

Keywords: Strategy Formation in Hospital; Strategic Issue; Strategic Collaboration; Theory Elaboration; Case Study; Qualitative Research

INTRODUCTION

Across Europe, public healthcare organizations experienced far-reaching changes over the past decades. The implementation of new funding models (Herwartz & Strumann, 2011; Ridder, Doege, & Martini, 2007) as well as tight public budgets create the need to constantly innovate to enhance performance not only in Germany but also in other European countries (Dent, 2005; Piening, 2011). Furthermore, market consolidation processes cause shifts in ownership type or even result in hospital closures (Dent, Howorth, Mueller, & Preuschoft, 2004). This new market-driven economic environment leads to intensified competition on the hospital market and challenges the traditional understanding of strategy formation (Currie, Waring, & Finn, 2008; Zimmerman, Lindberg, & Plsek, 1998). Given that strategic decisions must accord with economic and medical demands, strategic issues cannot longer be solely developed and processed by management professionals. Instead, successful strategy formation also depends on the development and processing of previously unknown (unintended) strategic issues generated through the expertise of medical professionals.

Consequently, in the age of new public management, "…a hybrid management model is taking shape throughout the German hospital sector" (Bode & Maerker, 2014, p. 401). Within this new management model, public hospitals transform themselves from traditional vertically integrated organizations into more responsive and decentralized units to better serve the needs of their various stakeholders (Ferlie, Fitzgerald, McGivern, Dopson, & Bennett, 2011). In doing so, medical professionals move away from their "silo-thinking" and "tribal behavior" (Bate, 2000), becoming more deeply involved in strategic management functions that concern the entire organization (Noordegraaf, 2011). Specifically, the collaborations between management and medical professionals in medical centers encourage joint thinking across boundaries and bring together both management and medical expertise (Currie et al., 2008; Currie & Lockett, 2011). In sum, the literature is unambiguous in that hospitals represent complex organizations

in which the simultaneous processing of intended strategic issues from the board of executives and unintended strategic issues from head physicians is of utmost importance (Currie et al., 2008; Zimmerman et al., 1998). However, “What appears to be lacking is an elaborate answer to the ‘how to’ question“ (Sminia, 2009, p. 114). How are the intended and unintended strategic issues processed in strategy formation and integrated into the strategic agenda? Do both types of strategic issues exist in hospitals and, if so, how are they balanced? Is there a dominance of one type? Most current studies consider the formation of intended and unintended strategic issues as either/or choices and provide only partial perspectives on the strategy formation process (Hendry, 2000; Jarzabkowski, 2003). Therefore, this study addresses these literature gaps by empirically investigating the collaboration between management and medical professionals in strategic processes in a German hospital group. Specifically, it explores how intended and unintended strategic issues emerge, how they are processed, and, finally, how they are integrated into the strategic agenda. Thus, providing a better understanding of strategy formation in hospitals.

Following the approach of Eisenhardt (1989b), this work is part of a *larger research project* initiated in 2013 that explores the management of strategy formation in hospitals. Specifically, an initial case study (Anonymous, 2017) demonstrates that the collaboration between management and medical professionals in medical centers is adequate for both the operationalization of intended strategic issues and development of unintended ones. However, the previous study reveals that the processing of intended and unintended strategic issues is hampered by unclear *structures* and deficient *interaction* processes. Hence, as unintended strategic issues have a smaller probability of being successful and need more support in terms of structure and interaction compared to the intended ones, integration into the strategic agenda is dominated by intended strategic issues. These insights resulted in a nascent theory of strategy formation in hospitals, which forms the basis of this research.

In fact, this study is planned as a sequential replication of the first study to better understand the mechanisms of strategy formation in hospitals and elaborate the previously generated theory. The nascent theory is used as a guiding framework for data analysis and categorizing the findings. Specifically, it investigates whether the empirical results of this study can confirm, disconfirm, or extend the previous results. To this end, this study empirically investigates the strategy formation process in a different public hospital group than the first study and analyses the collaboration of management and medical professionals in a comparable setting. Specifically, it identifies the key features of *structure* and *interaction* and specifies how they affect the processing of intended and unintended strategic issues. Furthermore, *organizational spirit* is identified as a new construct, relevant in the strategy formation process. The empirical findings provide a basis for advancing the conceptualization and operationalization of the strategy formation theory in hospitals. Its theoretical contribution thus lies in a better understanding of the strategy formation process in hospitals and elaborating the theory of strategy formation in hospitals. Through comparing the two sequential case studies, a mechanism that explains how the different characteristics of structure, interaction, and organizational spirit influence the processing of intended and unintended strategic issues and their integration into the strategic agenda is identified. Further, the theory elaboration meets the call by Mathieu (2016) to strengthen and establish the validity status of a theory, thereby minimizing the trend of framework proliferation (Edmondson & McManus, 2007; Hutzschenreuter & Kleindienst, 2006).

THEORETICAL BACKGROUND

The strategy formation process has been given attention in scientific research for a long time. Increasingly, the traditional view on strategy – as the product of a deliberate decision-making process – has come under attack from management scholars, giving rise to a broad debate on the nature of the strategy process (Lavarda, Canet-Giner, & Peris-Bonet, 2010; Mintzberg &

McHugh, 1985). Extensive case studies led to a refinement of strategy formation conceptualization as a "choice model" and criticized the traditional image of the plannable and deliberate process of strategy-making in current organizations (Bower, 1970; Langley, Mintzberg, Pitcher, Posada, & Saint-Macary, 1995; Mintzberg, 1978). Instead, some authors demonstrated that strategies may also form out of uncoordinated decisions, describing strategy formation as a complex and partly emergent process (Burgelman, 1983; Grant, 2003; Mintzberg & Waters, 1985). As such, a new definition of strategy formation "…as a pattern in a stream of decisions or actions" (Mintzberg & McHugh, 1985, p. 161) emerged. Within this term, a variety of relationships between the upsurge of strategic issues and their realization can be conceptualized (Mintzberg, 1978, p. 645). For instance, strategic issues that can be planned in a top-down, rational, and analytical way are called *intended strategic issues*. However, strategic issues can also emerge in a bottom-up and unplanned way, being called *unintended strategic issues.* If intended strategic issues become integrated into the strategic agenda, they are called *deliberate strategies.* If unintended strategic issues become integrated into the strategic agenda they are named *emergent strategies.* Studies point out that, especially in complex organizations, deliberate and emergent views must be adopted to create successful strategy formation (Andersen, 2004). In this respect, research has highlighted that hospitals are complex organizations and specific in their strategic orientation (Currie et al., 2008). Specifically, external regulation, increasing competition, and continuous financial crises affect strategy formation exogenously (Tiemann & Schreyoegg, 2012), while limited resources, the heterogeneity of professions, and barriers in coordination are internal constraints to strategy formation (Kitchener, 1998). Therefore, strategy formation in hospitals cannot solely stem from hierarchically planned top-down strategic issues, but manager's competence and medical expertise have to be connected to use their mutually exclusive knowledge.

Therefore, the strategy approach of Mintzberg (1978) is used to theoretically conceptualize the collaboration between management and medical professionals and investigate the strategy formation process in hospitals. Specifically, in hospitals, intended strategic issues are introduced by the board of executives and result from their management expertise and the consideration of strategic context factors, such as the competitive situation or organizational mission. Conversely, unintended strategic issues in hospitals stem from the medical professionals, who develop these issues based on their medical expertise and working experience. Whereas deliberate and emergent strategies are generally recognized today, most studies provide only partial perspectives on the strategy formation process (Mirabeau & Maguire, 2014; Sminia, 2009). Specifically, little is known about how the collaboration between medical and management experts is managed for strategy formation. As Andersen (2004a) claims, "…there is a clear need to enrich our understanding of the complex integrative strategy process and the dynamic interaction between emergence and planning" (p. 1273).

As previously mentioned, this study is part of a larger research project exploring strategy formation in hospitals. A first case study led to the generation of a nascent theory of strategy formation in hospitals, which is used in this study as guiding framework for data analysis and for the categorization of the findings. Therefore, the provisional constructs and tentative relationships of the nascent theory are described more in detail here. The previous case study also examined the strategy formation process of a German hospital group (A). That hospital group had reorganized its strategy formation process by using the expertise of management and medical professionals in strategy formation under a medical center structure. The structure of the medical centers was an ideal template for the emergence of intended and unintended strategic issues in hospitals. However, the effective collaboration between management and medical professionals was hampered by shortcomings in structural elements and interaction processes of

strategy formation. Specifically, unclear tasks for the work in the medical centers, lack of decision authority of the medical professionals, lack of additional resources for strategic processes, and weak administrative support hindered the processing and integration of strategic issues. Furthermore, unclear criteria on whether a strategic issue was worthy of pursuit, no pre-specified procedures on how to systematically work on a strategic issue, and non-transparent decision making of management professionals further impeded strategy formation. These empirical findings resulted in the generation of a nascent theory of strategy formation in hospitals, which provides tentative answers on how strategic issues are developed, processed, and integrated into the strategic agenda. Specifically, the theory indicates an interplay between structure and interaction. Deficient structural elements influence the interaction processes, which are not goal oriented in the initial sense and lack the systematic processing of strategic issues. In turn, inefficient interaction leads to the medical center structure not being used as expected. Therefore, the integration of deliberate and emergent strategies in the strategic agenda was dominated by intended strategic issues becoming deliberate strategic issues. Since intended strategic issues are more likely to be accepted by the board of executives and integrated into the strategic agenda than unintended ones, unintended strategic issues need more support in terms of structure and interaction than intended ones. Therefore, the theory implies that an aligned interplay between structure and interaction facilitates the effective management of deliberate and emergent strategies.

These tentative relationships form the basis for further inquiry. Specifically, this study is a sequential replication to better understanding the mechanisms of strategy formation in hospitals and elaborating the nascent theory. Specifically, the aim of this second wave is to empirically investigate the strategy formation process in a comparable hospital group (B) and examine how intended and unintended strategic issues emerge, how they are simultaneously processed, and, finally, how they are integrated into the strategic agenda.

METHOD

To research the collaboration between management and medical experts in strategy formation, a *case study* is an appropriate research strategy. Case studies are especially useful for studying contemporary phenomena in real-life contexts. They are a preferred method when the phenomenon is complex and needs in-depth analysis and when "how" and "why" questions need to be answered (Yin, 2014). Similarly, case studies allow the investigation of research objects over a longer period and, typically, combine data stemming from different sources, such as interviews, documents, and archival data (Eisenhardt, 1989a). Therefore, a case study design is thought to be suitable for conducting holistic research into strategy formation processes and providing insights into the processing and integration of intended and unintended strategic issues in hospitals. Furthermore, this study uses an *embedded* design, that is, the medical centers of the hospital group are embedded units of analysis.

As previously mentioned, this work is part of a larger research project on strategy formation in hospitals. To date, two case studies have been carried out. The first study started in 2013 and was conducted over two years. The insights resulted in the creation of the nascent theory strategy formation in hospitals, implying that strategy formation is influenced by an interplay between structure and interaction. However, it is unlikely this theory explains the processes of strategy formation in hospitals sufficiently. Moreover, a nascent theory is "…often an invitation for further work on the issue" and needs further empirical validation to become an intermediate theory (Edmondson & McManus, 2007, p. 1160). Therefore, the second case study, which is presented in this paper, was initiated in the spring of 2017. The empirical investigation of a comparable case in a similar setting is common in qualitative research to elaborate and specify constructs and relationships more precisely. Specifically, relying on multiple and sequential case studies fosters the development of a richer strategy formation theory in hospitals over time. In doing so, the tentative constructs and relationships in the first study serve as a basis for the

empirical investigation in this second case. This combination of deduction and induction over time and the "sequential replication logic" provide a basis for theoretical inferences (Denis, Lamothe, & Langley, 2001; Yin, 2014). Specifically, this second case study should provide a better understanding and verify the mechanisms of strategy formation in hospitals and thus elaborate the nascent theory into an intermediate one. In short, a multiple case design with embedded units of analysis and a sequential replication is used.

Case Selection Rationale

The second case was selected based on theoretical reasons (Eisenhardt, 1989a). Theoretical sampling creates an opportunity for comparisons through a matched pair design, and constructs and relationships are more deeply grounded in varied empirical evidence (Eisenhardt, Graebner, & Sonenshein, 2016). Therefore, the second hospital group was selected based on its ability to illustrate and extend the relationship between structural characteristics and interaction processes and explain their effect on strategy formation, thus providing a better understanding of the collaboration between the management and medical professionals for strategy formation. Specifically, the second hospital group is located in the same region as the one in the first study, has the same ownership type (public), provides the same medical services, and is affected by the same external constrains (i.e., increasing health expenditures and tight public budgets represent ongoing challenges for all German public hospitals) (Ridder et al., 2007; Tiemann & Schreyoegg, 2012). Inpatient care is paid through a new funding model, based on a fee-for-service logic that puts additional pressure on less efficient hospitals (Bode & Maerker, 2014; Herwartz & Strumann, 2011). Therefore, public hospitals face pressure regarding organizational restructuring and the adoption of new forms of hospital management. Consequently, the second hospital group promotes the collaboration between management and medical professionals in medical centers as well (D'Amour, Goulet, Labadie, San Martin-Rodriguez, &

Pineault, 2008). In summary, the two hospital groups are well matched in terms of organizational characteristics. The second hospital group thus provides an ideal field setting to elaborate the nascent theory proposed in the first study and investigate how management and medical expertise are combined for strategy formation (Edmondson & McManus, 2007).

Research Setting

The empirical study was conducted in a typical public hospital group in Germany, which consists of three sites and employs around 4,600 staff members. The hospital groups serves a region of approximately 1.2 million people, admits more than 150,000 patients per year, and offers a wide range of medical treatments. Furthermore, it consists of 1,280 beds in 30 clinical departments. The overall organization is directed by a board of executives, consisting of three individuals, followed by two administrative directors. At the time of this study, the hospital group was under enormous pressure to make its organizational structures more efficient to reduce its debts, decrease operational costs, and increase revenue. Consequently, at the beginning of 2016, the board of executives formulated the extensive strategic intent to modernize the organization, which concentrated on "…the bundling of medical and management expertise in the form of medical centers, […] the combination of thematically related and medically symbiotic disciplines, […] and the focus on innovative lighthouse projects" (official strategic intent). In this way, the company's future should be clear and parallel structures abolished. At the beginning of the empirical study, in the spring of 2017, four of the planned six medical centers were already established (i.e., internal medicine, anesthesia, trauma surgery, and visceral medicine). Moreover, one of the head physicians was appointed as managing director of the center. The members of each medical center met regularly during official center meetings and one member of the board of executives always attended as well. Furthermore, each medical center had clearly defined rules of procedures, in which strategic objectives were defined. Specifically, the

collaboration between management and medical experts in the medical centers aimed to minimize the idea of competition within the hospital group, systematically foster the strategic development of the medical departments, standardize the medical supply between the three hospital sites, and unify the training contents of the medical professionals. Overall, this second hospital group is an adequate research setting to investigate how the collaboration between medical and management experts in strategy formation is managed and how intended strategic issues from the board of executives and unintended strategic issues from head physicians are integrated into the strategic agenda.

Data Sources

The data collection started in spring 2017, using the same processes of data collection and interpretation as in the initial case study (see also Anonymous, 2017). Specifically, three sources of data were used: semi-structured interviews, internal documents, and archival data. First, 14 *interviews* were conducted, including all members of the board of executives, three administrative directors, two medical directors, and all managing directors of the medical centers. Furthermore, two members of the board of executives were interviewed twice, once at the beginning and once at the end of the research project. These key informants were selected based on their knowledge on the strategy formation process within the organization, as well as their access to critical information due to their positions within the organization. The interviews were semi-structured and consisted of three parts. It first briefly asked for background information on the interviewee. Each informant described his/her current position within the hospital group and provided information about his/her tasks in the strategy formation processes of the organization as a general view of the participation in strategy formation. The second part concentrated on the strategy processes in the medical centers (e.g., how is the collaboration within the medical centers structured; what tasks do you take on as the managing director; and who decides

which topics are strategically relevant? and questions related to the processing of strategic issues and integration into the strategic agenda. Finally, the last part of the interview aimed to obtain insights into the extent to which the collaboration between the management and medical profession in the medical centers is appropriate for successful strategy formation and, thereby, focused on the organizational structure and resources. Overall, the interviews were conducted under the guarantee of confidentiality and anonymity. Each interview lasted from 50 to 90 minutes, was tape recorded, and transcribed within 24 hours. Furthermore, after the interview, memos with ongoing impressions of the interview were made, which included all data, regardless of their apparent importance at the time of the interview (Eisenhardt, 1989a). Second, interview data were complemented with analyses of *internal documents*, for example, organizational strategy documents, project reports, and quality reports. Furthermore, it was provided access to the minutes of a variety of types of strategic meetings for a holistic picture of the collaboration between strategic actors and to develop a detailed chronology of the processing of strategic issues. Finally, *archival data* were collected, including newspaper articles, business publications, and press reports. Overall, the documents and archival data were used as data source in their own right and to confirm the interview data. Data triangulation further enhanced the validity of the findings and reliability of the study (Berg, 2007). The potential bias stemming from relying on single informants was addressed as follows. First, the guarantee of confidentiality promoted candor. Second, informants were directly involved in the strategy formation process. Finally, interview data were supplemented with internal documents and archival data by checking and augmenting the evidence to reduce inaccurate data, over-simplification, or attributional biases (Bingham & Eisenhardt, 2011).

Data Analysis

Using the qualitative data analysis software MAXQDA, the data were coded for empirical patterns. The list of codes stemmed from the nascent theory and included the focal constructs of

structure and *interaction* or, more precisely, their sub-categories (i.e., tasks, roles, decision authority, resources, criteria, procedures, decision making). However, it remained open to unexpected events and the emergence of new (in-vivo) codes. In accordance with replication logic (Yin, 2014), this case was strictly treated as a distinct analytical unit. The data analysis was conducted in three steps. First, the processing of intended and unintended strategic issues in each medical center was inspected. This within-case analysis concentrated on the developing of first-order codes related to the strategy formation process. It was drawn upon interviews, documents, and archival data to analyze the collaboration between medical and management experts and track how both intended and unintended strategic issues were handled in each medical center. Second, after compilation and inspection, data were condensed and aggregated, and techniques for data reduction and presentation similar to those suggested by Miles, Huberman, and Saldaña (2014) were used. The analytic technique of pattern matching helped improve the internal validity of the results. Specifically, the iteration among medical centers sharpened the similarities and differences in the processing of strategic issues and enabled the identification of emergent themes and relationships between these second-order codes. Furthermore, by analyzing the strategy formation processes of different medical centers (as embedded units of analysis), analytical generalization was improved. In the final step, it was investigated to what extent the patterns and relationships found in this study aligned with the nascent theory in the first study. This combination of deduction and induction over time and the sequential replication logic provided the basis for theoretical inferences (Denis et al., 2001; Yin, 2014). Specifically, if the emerging patterns and relationships were consistent with the ones of the first study, they provided the opportunity to validate and refine the tentative model. Furthermore, if the patterns and relationships differed from the previous results for reasons that were not inconsistent with the provisional explanations of the tentative theory, this provided the opportunity to introduce new constructs and propose new relationships between them (Edmondson & McManus, 2007;

Gilbert, 2005). The systematic comparison and identification of commonalities and idiosyncrasies between the two cases sharpened both the constructs and theoretical logic of the relationships between constructs, thereby extending the nascent theory of the first study (Eisenhardt, 1989a). Finally, to improve the reliability of the study, a clear chain of evidence was established and the research procedures were carefully documented (Yin, 2014).

Insert Figure 1 about here

Figure 1 provides an overview of the data structure and provides insights into the aggregation of first-order codes, second-order codes, and constructs in conducting the data analyses. Furthermore, a summary of representative supporting data for each second-order code is provided in Table 1.

Insert Table 1 about here

RESULTS

Using the constructs of the nascent theory developed by Anonymous (2017), the empirical findings of this second case study are described in detail in the following, providing insights into the collaboration between medical and management experts in the medical centers. Thereafter, the findings are systematically compared to the findings of the previous case and the similarities and differences elucidated. These insights are finally used in the discussion section to better understand the mechanisms of strategy formation in hospitals and determine to what extent the relationships proposed by the nascent theory can be replicated in the second case or how and why the findings contribute to elaborating the previously generated nascent theory.

Decision Authority within a Clear Structure

First, several patterns emerged, providing an understanding of how and why *structural* elements influence the strategy formation process. The main idea behind the establishment of the medical

centers was to combine the medical and management expertise in strategy formation to minimize competition within the hospital group, strengthen the community, and increase revenues, while reducing costs. To achieve these goals, precise *tasks* descriptions for each center were included in the official rules of procedures. Specifically, together with the board of executives, each managing director formulated rules of procedure for his/her center, which included "… *the core products and services of the medical center, markets and customers, and the expected return on treatments*." However, not only the objectives of the medical center were defined here, but the rules of procedure also included a clear task description of the managing director. Specifically, the managing director's main task was to decide independently in which direction the center should develop further and thus to "*... propose strategic topics on their own, to assess and filter other suggestions on strategic topics, as well as to prepare and compile strategic issues for the meetings.*" Therefore, the managing directors were contact persons, coordinators, and persons in charge, with decision-making authority at the same time.

During the interviews, it became evident that the board of executives largely kept out of the center's work and provided a strategic direction in the form of strategic intent only: "*The board of executives has other things to do. Economists sit there, they don't know much about medicine.*" Specifically, the managing directors should process strategic issues independently and, therefore, held *decision authority*. As one of the interviewees explained, "*The managing director is not only the 'speaker' of the medical center, he also has decision-making powers [...] that is very important, because there's really a person in charge.*"

Although managing directors were allowed to decide on some strategic issues on their own and "*especially when it pays off, the board of executives usually has nothing against it*," the data revealed that, for strategic issues affecting the entire hospital group, the board of executives made the final decision. Finally, collaboration in the medical centers was not supported with additional *resources*: *"We do not have extra budget or personnel [...] the management tasks*

are included in our job." However, a project management unit was established to support and coordinate strategic projects and provide strategic actors with required administrative data. Hitherto, the results can be summarized as the decision authority of managing directors within clear structures.

Informal Interactions

Not only the structural characteristics affected the processing of intended and unintended strategic issues, but also *interaction* processes were relevant for strategy formation. Specifically, the regular exchanges between the board of executives and medical experts was emphasized as necessary prerequisites for the successful processing of strategic issues. Therefore, a number of regular meetings have been institutionalized, in which intended strategic issues were discussed and unintended strategic issues could be developed. As one of the interviewees mentioned, "*We take care of our instrument of interaction [...] and the board of executives is always present during the meetings.*" Furthermore, to ensure the sharing of information, the minutes of the meetings were sent to all involved employees, who also had to countersign its receipt. Despite these *coupled* communication channels**,** the data reveal that the processing of strategic topics did not always take place in the same way. Rather, the processing of strategic issues was described as an *informal* negotiation process: "*There is not really a formal procedure of how to do it; you have the experience and know how to prepare a topic in order to be successful.*" In this respect, the formal channels were outlined as insufficient to fully inform someone, as one of the interviewees stated: "*Many things happen informally, which can have even more weight and bring more progress than a strategy meeting every 4 weeks.*" However, some interviewees also expressed serious concerns about the use of informal procedures, as they depend on the individuals involved and can collapse rapidly if, for example, people change positions within the organization.

Nevertheless, the reason informal procedures were used in strategy formation can be the *criteria* based on which issues were processed. Specifically, the data demonstrate that a clear *organizational principle* was applied to decide whether to further pursue a strategic issue or not: "*Ultimately, we are a business enterprise and have to cover our costs. The company as a whole comes first and strategic issues must always pay off.*" This organizational principle with a focus on performance indicators was also found in the rules of procedure of the medical centers, where "*profitability analysis, cost-benefit ratio, black numbers*" represent recurring terms. However, the strong economic orientation was not perceived as restrictive, but rather the clear criteria made *decision-making* processes *transparent* and comprehensible for the involved actors. Although the board of executives was often in charge of the final decision, the processing of strategic issues was not enforced against the interferences of others. Instead, the data reveal that strategic decisions were often preceded by *constructive confrontation* processes, in which interdisciplinary actors were deliberately involved.

Hitherto, the results indicate that the application of a clear organizational principle based on economic criteria resulted in a transparent decision-making process. Furthermore, the frequent use of informal procedures was complemented by the processing of strategic issues in formal channels, that were coupled and in which interaction processes were often characterized by constructive communication processes.

Creating a Sense of Unity

In addition to the *structure* and *interaction*, several patterns emerged during data analysis regarding the *behavior of the board of executives*, as well as the *dominant belief system* of the actors involved in strategy formation. Specifically, the data show that the aforementioned interdisciplinarity of strategy actors and active participation in decision-making should promote company-wide thinking and aim at developing a sense of unity. Medical professionals who, prior to the establishment of the medical center structure, were in competition with each other

should now work together and jointly advance the strategic processes of the overall hospital group. For this purpose, an additional CEO was hired, who described his role as being responsible "*…to establish a certain corporate culture which emphasizes that it's all about togetherness and not about any territorial battles.*" Relationships among individuals and the employee-oriented behavior of the board of the executives can be described as *boundary management*, which one of the interviewees summed up as: "*The credo of the management is: There are no functions, there are only people.*" Additionally, the relevance of creating a sense of unity and the appreciation of employees were also expressed through *continuity* in the behavior of the board of executives. Specifically, the data reveal hardly any fluctuations in top-management positions. Changes only happened when "*employees were quietly retired*." Continuity was further supported by professional corporate communication. For example, early contract renewals were regularly communicated to the outside. Apart from boundary management and continuity, the behavior of the board of executives was characterized by *strategic planning*. A number of strategic issues can be identified as intended by the board of executives and provided with clear project orders and precise milestones. As one of the interviewees mentioned: "*Yes, the management gave us the order: We need a medical center for emergency medicine. Please work out a first concept within the next 4 months.*" However, strategic planning was not limited to intended strategic issues, but also the processing of unintended strategic issues. For this, strategic tools and templates were made available by the board of executives. Accordingly, data provide support that: "*The board of executives is very well organized. It operates, accepts suggestions, creates agendas, and also supports our topics.*"

Moreover, apart from the previously mentioned distinct organizational principle and strategic planning of the board of executives, several patterns emerged regarding the dom*inant belief system* of the actors involved in the strategy formation process. On one hand, the data reveal statements that describe *managerialism* as a belief system among the actors: "*Ultimately,*

everyone is interested making profit and in the overall hospital group doing well." On the other hand, the same interviewee added: "*... and that's why everyone will independently initiate strategic issues in his professional domain, which will promote this.*" The findings indicate that, despite the strong economic focus and emphasis on the entire hospital group, *professionalism* has not been lost. Moreover, managerialism and professionalism do not seem to contradict but even complement each other. In this respect, one interviewee stated: "*Many doctors have a problem with subordinating their activities to the economy, but I don't think so at all. I am convinced that if you treat a patient effectively and efficiently, you will treat him with high quality. A high-quality treatment, in turn, automatically generates a positive contribution margin which benefits the entire hospital group.*"

Overall, the identified patterns with regard to the dominant belief system of the actors and with the behavior of the board of executives are summarized under the term "*organizational spirit*," whose designation derives from an in-vivo code. One interviewee stated: "*In my opinion, the collaboration is really characterized by a very constructive and elaborate organizational spirit.*" Thus, in addition to structure and interaction, organizational spirit constitutes a third central construct that affects the strategy formation process.

Integration into the Strategic Agenda

The data reveal that not only the managerial and professional belief systems complement each other to an "organizational identity," but also the strategies in the final strategic agenda can be described as *organizational strategies*. Since, the organizational principle was applied to all strategic issues in the same way and interaction processes did not differentiate between intended strategic issues from the board of executives and unintended strategic issues from the head physicians, all strategic issues were similarly processed. Thus, a distinction in the final strategic agenda between deliberate and emergent strategies is not possible. As one of the interviewees stated: "*I can't tell you exactly from whom the topic actually came from. All I know is that we*

[in the medical center] were really enthusiastic about the issue and therefore discussed it again and again in different constellations." Additionally, the board of executives largely kept out of the center's work. Moreover, only intended strategic issues were initiated by the board of executives and have been formulated in general terms (e.g., improving education and training). Consequently, the data reveal that unintended issues have sometimes arisen due to the broadly formulated intended strategic issues. For example, the intended strategic issue "bundling of medical offers" resulted in the unintended strategic issue of "establishment of a center for adults with disabilities". Moreover, the intended strategic issue of "cost savings" was further specified into the unintended strategic issues of "management of operating rooms" and "bed management.". Consequently, it is difficult to assess the strategic agenda according to whether deliberate or emergent issues have been integrated. For this reason, a total of 14 organizational strategies are integrated into the strategic agenda and these strategies differ greatly in terms of content.

Comparison of Strategy Formation Between Hospital Groups

Considering the results of the overall research project for better understanding the mechanisms of strategy formation in hospitals and analyzing how strategic issues are processed and integrated into the strategic agenda, differences can be seen between hospital groups A and B. First, both hospital groups differ in terms of their *strategic agendas*. Specifically, in hospital group A, significantly fewer strategic issues (4) were integrated into the strategic agenda compared to hospital group B (14). Furthermore, the first study indicates that the strategic agenda was dominated by intended strategic issues becoming deliberate strategies and that unintended strategic issues needed more support in terms of structure and interaction compared to intended strategic issues. By contrast, this study shows different results. As previously described, in hospital group B, a total of 14 strategies were identified in the strategic agenda; however, it was not important whether these strategies stemmed from intended or unintended strategic issues. Whenever a

strategic issue met the organizational principle, it stood a good chance of being processed and finally integrated into the strategic agenda. Finally, it was impossible to distinguish between deliberate and emergent strategies.

Second, the *structural characteristics* of the strategy formation process differed between hospital groups. As per the left-hand side of Figure 2, strategy formation in A was characterized by unclear tasks, no decision authority, no resources, and missing administrative support. The board of executives only had the authority to make decisions. As a consequence of this high centralization level, strategic actors no longer felt responsible for the processing of strategic issues and strategy formation often stagnated (for detailed results, see Anonymous, 2017). The results of B on the right-hand side of Figure 2 show almost opposite specifications (illustrated by the grey shading of the areas of the circular fields). Specifically, for hospital group B, the data reveal clearly defined tasks, existing decision authority, and administrative support, which all promoted a good strategy formation process.

Insert Figure 2 about here

Third, the *interaction processes* in the two hospital groups differed. In hospital group B, the interaction had a high level of formalization, characterized by coupled procedural channels, clear criteria, and transparent decision making. On the other hand, in hospital group A, decoupled channels, unclear criteria, and non-transparent decision making resulted in largely inefficient interaction processes. Furthermore, in contrast to B, no informal procedures were used in A either, as can be seen in Figure 2.

Finally, the *organizational spirit* was identified as being relevant in the strategy process of hospital group B. Specifically, the boundary management of the board of executives and the continuity in top created a sense of unity and a positive organizational spirit. In this regard, a high trust level and good collegiality were mentioned as important reasons for using informal

procedures. In hospital group A, on the other hand, positive spirit was not evident at all. Instead, a lack of boundary management and frequent changes of the individuals in top-management positions was witnessed and archival data highlighted internal troubles and strikes. Therefore, the sense of unity hardly evolved. Moreover, the dominant belief system in hospital group A was professionalism and strategic actors remained in their silo-thinking. By contrast, in hospital group B, both managerialism and professionalism could be identified (see Figure 2). Specifically, the existence of decision authority and clear criteria allowed strategic actors to decide largely autonomously in their respective areas. Accordingly, they remained professional. However, boundary management and strategic planning from the board of executives created awareness of the entire organization, which resulted in a managerial belief system at the same time.

In sum, in hospital group B, the collaboration between management and medical experts in strategy formation can be described as a coordinated process, in which strategic issues are systematically processed. Here, it does not matter whether strategic issues are postulated as intended issues by the board of executives or developed as unintended ones by the head physicians as all strategic issues have the same chance to be integrated into the strategic agenda. Conversely, in hospital group A, the collaboration between management and medical experts was rather uncoordinated. Strategic issues are not systematically processed and integrated into the strategic agenda. These findings are used to further elaborate the theory of strategy formation.

DISCUSSION

Being part of a larger research project, this study was planned as a sequential replication of a first study to better understand the mechanisms of strategy formation in hospitals and further elaborate the previously generated nascent theory. Specifically, the aim was to understand how intended and unintended strategic issues emerge, how they are processed, and, finally, how they

are integrated into the strategic agenda. The theoretical model in Figure 3 illustrates overarching, comparative themes emerging from the sequential replication. The figure visualizes (1) the coexistence of intended and unintended strategic issues; (2) emphasizes the interplay of structure, interaction, and organizational spirit as being relevant in the processing of strategic issues; and, finally, (3) visualizes the integration of organizational strategies into the strategic agenda. In the following, the findings are discussed in detail.

Insert Figure 3 about here

Overall, this study makes three contributions to the literature. First, it validates the proposed relationship of the nascent theory that there is an *interplay* between structure and interaction. However, in contrast to the results of the first case study, which show that structural deficits lead to poor interaction and vice versa, this study reveals that well-developed structural characteristics lead to efficient interaction processes and vice versa. On one hand, the theoretical model demonstrates that structure influences interaction. Specifically, clear *tasks* result in an effective use of *procedural channels*, as everyone is aware of their roles in the strategy process and knows how to use the channels to fulfil tasks. Furthermore, clear *tasks* lead to decisions being made more *constructively* and *transparently*, because it is known to what extent decisions can be made independently or when the board of executives makes the final decision. These findings are in line with research suggesting that unclear structures can lead to inefficient interaction processes (Bate, 2000; Elbanna, 2006). However, they add to the literature by demonstrating that clear structures can also lead to constructive decision making. Furthermore, the existence of *decision authority* also influences interaction. Specifically, decision authority allows *informal procedures* to be used, which sometimes results in strategic topics being processed and decided apart from official channels. Thereby, this finding addresses the recent call by Veronesi, Kirkpatrick, and Altanlar (2015) to explore the link between decision autonomy

and clinical participation in strategy formation. Finally, the availability of *administrative support* has an impact on interaction, by ensuring that strategic actors are provided with adequate information and data. In this way, decision-making *transparency* increases, facilitating the application of *organizational principles*.

On the other hand, Figure 2 emphasizes that interaction also influences structure. Specifically, the data reveal that clear *criteria* ensure that the information and data to be requested from *administrative support* are precisely known and support the strategy process. Furthermore, *informal procedures* sometimes make it possible to use *decision authority* and process strategic issues quicker. Finally, participation in *decision making* helps ensure that everyone knows what their *tasks* are and also feels responsible for processing strategic issues.

In addition to the validation and strengthening of the interplay between structure and interaction, this study *refines* the initial model of strategy formation by detailed insights into the interaction processes. In this respect, it reveals transparency as an important parameter in *decision making.* Specifically, the processing of strategic issues in hospital group B went better compared to A because clear criteria made decision making more transparent and comprehensible for the involved actors. Furthermore, besides formal *procedures*, the use of informal procedures was crucial to rapid strategic processing and making use of decision authority. This findings inform the debate on the nature and characteristics of communication channels in strategy processes (Ocasio, Laamanen, & Vaara, 2018).

The second contribution relates to the *extension* of the nascent theory of strategy formation. Specifically, in this replication study a new construct emerged and the theoretical model was extended by the inclusion of *organizational spirit* as a relevant construct in the strategy formation process. As per Figure 3, organizational spirit is conceptualized by the *behavior of the board of the executives* and *dominant belief system.* Specifically, the theoretical model indicates an *interplay* between organizational spirit, structure, and interaction. On the one hand, the study

reveals that clear *tasks*, existing *decision authority*, and clear *criteria* lead to a *dominant belief system*, characterized by both professional and managerial values. This finding provides insight into the debate on the interplay of medicine and management (Noordegraaf, van der Steen, & van Twist, 2014) by demonstrating that a "hybrid identity" (Noordegraaf, 2016, p. 790) can emerge, in which different logics are combined and conflicts of interest minimized.

On the other hand, the study indicates that the organizational spirit also affects structure and interaction in strategy formation. A *dominant belief system* characterized by both managerialism and professionalism facilitates the ability to understand the positions of other actors and, thus, makes *decision making* more constructive. Furthermore, the behavior of the board of executives influences interaction. Specifically, *boundary management* and *continuity in leadership positions* are important conditions for the growth of trust and development of a sense of togetherness, which support the use of informal *procedures.* These findings are in line with research on the resistance to collaboration decreases when the sense of unity is strengthened and individuals feel committed to their organization and not just to their own department (Fitzgerald, Ferlie, McGivern, & Buchanan, 2013).

Additionally, this study informs the debate on the effect of *strategic planning* on the strategy formation process. On one hand, *strategic planning* affects interaction because it leads to a better coupling of formal *procedures* and allows clear *criteria* to be applied in the strategy formation processes. On the other hand, *strategic planning* has an impact on structure, as *task* incongruences are minimized and it is precisely determined by whom and until when tasks need to be performed. This finding supports the suggestions in prior work that a high level of strategic planning provides well-defined expectations about future tasks and promotes a strategic decision process based on precise efficiency criteria (Fredrickson, 1986). Overall, this study reveals that, besides structure and interaction, organizational spirit is highly relevant in strategy formation, thereby extending the nascent theory of strategy formation.

Third, this study contributes to the literature by the specification of a mechanism that explains how strategy formation unfolds in hospitals. Specifically, the study shows that an aligned interplay between structure, interaction, and organizational spirit facilitates the integration of management and medical expertise in strategy formation and results in a comprehensive strategic agenda. By contrast, the first case study of this research project revealed that the interplay between unclear structures and deficient interaction processes results in an unbalanced strategic agenda dominated by deliberate strategies initiated by the board of executives. Therefore, through a systematic comparison of the two cases, the *interplay* between structure, interaction, and organizational spirit can be specified as a mechanism of strategy formation in hospitals. Specifically, this mechanism explains how capable an organization is in strategy formation and for this reason it is called *strategy making capabilities* (see Figure 3).

In this respect, the theoretical model demonstrates that strategy making capabilities affect the processing of intended strategic issues and of unintended strategic issues in the same way. As such, a distinction between the two types is no longer important. As Figure 3 demonstrates, at the beginning of the strategy formation process, a distinction can still be made between intended strategic issues from the board of executives and unintended ones from the head physicians. However, during the processing of strategic issues, the two parallel strategy strands disappear. In the final strategic agenda, only *organizational strategies* are integrated. Thereby, it is not important whether these organizational issues were intended or unintended because they have been evaluated according to a clear organizational principle and are relevant for the entire company. Therefore, following Dutton (1986), the strategic agenda is assessed in terms of its strategic issue *size* and *variety* (see Figure 3). This finding enriches the understanding of an integrative strategy process (Andersen, 2004) and informs the debate on the relationship between deliberate and emergent strategies (Mintzberg & Waters, 1985).

Additionally, this study reveals that an interplay between clear structures, effective interaction, and a positive organizational spirit can be conceptualized as good strategy-making capabilities that result in a comprehensive strategic agenda. A positive organizational spirit is characterized by the *behavior of the board of executives* that includes boundary management, strategic planning, and continuity in leadership positions, as well as by a *dominant belief system* comprising both professional and managerial values. This accords with the prior finding that standardized procedures and strategic planning positively affect the comprehensiveness of a strategic agenda (Fredrickson, 1986) and is in line with research indicating that the lack of a purposeful structuring of strategy formation can have a negative effect on its comprehensiveness (Anonymous, 2017; Bisbe & Malagueño, 2012). Furthermore, the conceptualization and empirically validation of strategy-making capabilities inform the debate on effective strategy processes as one kind of dynamic capabilities (Hutzschenreuter & Kleindienst, 2006) and add to the strategic management literature (Hutzschenreuter & Kleindienst, 2006) by identifying "[w]hat are the forces that shape a firm's strategic agenda" (Hutzschenreuter & Kleindienst, 2006, p. 708).

Overall, this study contributes to a better understanding of the mechanisms of strategy formation in hospitals. Although the findings of this sequential replication study contrast with the empirical findings of the first study, they are consistent with the theoretical explanations of the nascent theory. Therefore, this study validates and extends the provisional explanations and further elaborates the nascent theory of strategy formation into an intermediate theory (Edmondson & McManus, 2007). As such, it addresses the call for conducting more replication studies and for more careful modelling, thereby minimizing the trend toward framework proliferation (Mathieu, 2016; Shepherd & Rudd, 2014).

CONCLUSION

This study indicates that medical experts can have a decisive influence on the strategic formation process, as long as they have the decision authority to do so. However, the involvement of medical experts in strategic decision making is only efficient if clear structures, clear criteria, and strategic planning provide a clear strategic orientation. Therefore, a low formalization level can be dangerous for a complex organization such as a hospital because the different beliefs and goals of the strategic actors constrain the strategy formation process and joint decision-making becomes more difficult. In this respect, the collaboration of management and medical experts in medical centers is a useful trend to reduce competition within the hospital group and strengthen the community. Nevertheless, medical centers are not the only strategic forums under which strategic processes are conducted. The decision-making processes in medical centers are simply too slow. For this reason, the use of informal procedures is also important in strategy formation to process strategic issues more quickly and effectively. As such, trust and good relationships are prerequisites for the successful handling of strategic issues. Furthermore, boundary management, for example, in the form of the creation of interdisciplinary working groups or the organization of debates with participants from different departments, promotes a positive organizational spirit and supports collaborations between the management and medical professionals. Finally, professional corporate communication can support strategy formation processes. On one hand, information systematically and transparently circulates within the company. On the other hand, a consistent external appearance enhances the chance that the company will be remembered by the public for a longer time and employees' sense of togetherness increases.

REFERENCES

Andersen, T. J. (2004). Integrating decentralized strategy making and strategic planning processes in dynamic environments. *Journal of Management Studies*, *41*(8), 1271–1299. doi:10.1111/j.1467-6486.2004.00475.x

Bate, P. (2000). Changing the culture of a hospital: From hierarchy to networked community. *Public Administration*, *78*(3), 485–512. doi:10.1111/1467-9299.00215

Berg, B. L. (2007). *Qualitative research methods for the social sciences* (6th ed.). Boston: Pearson/Allyn & Bacon.

Bingham, C. B., & Eisenhardt, K. M. (2011). Rational heuristics: The 'simple rules' that strategists learn from process experience. *Strategic Management Journal*, *32*(13), 1437–1464. doi:10.1002/smj.965

Bisbe, J., & Malagueño, R. (2012). Using strategic performance measurement systems for strategy formulation: Does it work in dynamic environments? *Management Accounting Research*, *23*(4), 296–311. doi:10.1016/j.mar.2012.05.002

Bode, I., & Maerker, M. (2014). Management in medicine or medics in management?: The changing role of doctors in German hospitals. *International Journal of Public Sector Management*, *27*(5), 395–405. doi:10.1108/IJPSM-06-2012-0068

Bower, J. L. (1970). *Managing the resource allocation process*. Boston.

Burgelman, R. A. (1983). A model of the interaction of strategic behavior, corporate context, and the concept of strategy. *Academy of Management Review*, *8*(1), 61–70. doi:10.5465/AMR.1983.4287661

Currie, G., & Lockett, A. (2011). Distributing leadership in health and social care: Concertive, conjoint or collective? *International Journal of Management Reviews*, *13*(3), 286–300. doi:10.1111/j.1468-2370.2011.00308.x

Currie, G., Waring, J., & Finn, R. (2008). The limits of knowledge management for UK public services modernization: The case of patient safety and service quality. *Public Administration*, *86*(2), 363–385. doi:10.1111/j.1467-9299.2007.00705.x

D'Amour, D., Goulet, L., Labadie, J.-F., San Martin-Rodriguez, L., & Pineault, R. (2008). A model and typology of collaboration between professionals in healthcare organizations. *BMC Health Services Research*, *8*. doi:10.1186/1472-6963-8-188

Denis, J.-L., Lamothe, L., & Langley, A. (2001). The dynamics of collective leadership and strategic change in pluralistic organizations. *Academy of Management Journal*, *44*(4), 809–837. doi:10.2307/3069417

Dent, M., Howorth, C., Mueller, F., & Preuschoft, C. (2004). Archetype transition in the German health service? The attempted modernization of hospitals in a North German state. *Public Administration*, *82*(3), 727–742. doi:10.1111/j.0033-3298.2004.00416.x

Dent, M. (2005). Post-New Public Management in public sector hospitals?: The UK, Germany and Italy. *Policy and Politics*, *33*(4), 623–636. doi:10.1332/0305573054329208

Dutton, J. E. (1986). Understanding strategic agenda building and its implications for managing change. *Scandinavian Journal of Management Studies*, *3*(1), 3–24. doi:10.1016/0281-7527(86)90008-3

Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review*, *32*(4), 1155–1179.

Eisenhardt, K. M. (1989a). Building theories from case study research. *Academy of Management Review*, *14*(4), 532–550.

Eisenhardt, K. M. (1989b). Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, *32*(3), 543–576. doi:10.2307/256434

Eisenhardt, K. M., Graebner, M. E., & Sonenshein, S. (2016). Grand challenges and inductive methods: Rigor without rigor mortis. *Academy of Management Journal*, *59*(4), 1113–1123. doi:10.5465/amj.2016.4004

Elbanna, S. (2006). Strategic decision-making: Process perspectives. *International Journal of Management Reviews*, *8*(1), 1–20.

Ferlie, E., Fitzgerald, L., McGivern, G., Dopson, S.U.E., & Bennett, C. (2011). Public policy networks and wicked problems: A nascent solution? *Public Administration*, *89*(2), 307–324. doi:10.1111/j.1467-9299.2010.01896.x

Fitzgerald, L., Ferlie, E., McGivern, G., & Buchanan, D. (2013). Distributed leadership patterns and service improvement: Evidence and argument from English healthcare. *The Leadership Quarterly*, *24*(1), 227–239. doi:10.1016/j.leaqua.2012.10.012

Fredrickson, J. W. (1986). The strategic decision process and organizational structure. *The Academy of Management Review*, *11*(2), 280. doi:10.2307/258460

Gilbert, C. G. (2005). Unbundling the structure of inertia: Resource versus routine rigidity. *Academy of Management Journal*, *48*(5), 741–763.

Grant, R. M. (2003). Strategic planning in a turbulent environment: Evidence from the oil majors. *Strategic Management Journal*, *24*(6), 491–517. doi:10.1002/smj.314

Hendry, J. (2000). Strategic decision making, discourse, and strategy as social practice. *Journal of Management Studies*, *37*(7), 955–978. doi:10.1111/1467-6486.00212

Herwartz, H., & Strumann, C. (2011). On the effect of prospective payment on local hospital competition in Germany. *Health Care Management Science*, *15*(1), 48–62. doi:10.1007/s10729-011-9180-9

Hutzschenreuter, T., & Kleindienst, I. (2006). Strategy-process research: What have we learned and what is still to be explored. *Journal of Management*, *32*(5), 673–720. doi:10.1177/0149206306291485

Jarzabkowski, P. (2003). Strategic practices: An activity theory perspective on continuity and change. *Journal of Management Studies*, *40*(1), 23–55.

Kitchener, M. (1998). Quasi-market transformation: An institutionalist approach to change in UK hospitals. *Public Administration*, *76*(1), 73–95.

Langley, A., Mintzberg, H., Pitcher, P., Posada, E., & Saint-Macary, J. S. (1995). Opening up decision making: The view from the black stool. *Organization Science*, *6*(3), 260–279.

Lavarda, R. A. B., Canet-Giner, M. T., & Peris-Bonet, F. J. (2010). How middle managers contribute to strategy formation process: Connection of strategy processes and strategy practices. *Revista de Administração de Empresas*, *50*(4), 358–370.

Mathieu, J. E. (2016). The problem with [in] management theory. *Journal of Organizational Behavior*, *37*(8), 1132–1141. doi:10.1002/job.2114

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (Third edition). Thousand Oaks: Sage Publications.

Mintzberg, H. (1978). Patterns in strategy formation. *Management Science*, *24*(9), 934–948. doi:10.1287/mnsc.24.9.934

Mintzberg, H., & McHugh, A. (1985). Strategy formation in an adhocracy. *Administrative Science Quarterly*, *30*(2), 160–197. doi:10.2307/2393104

Mintzberg, H., & Waters, J. A. (1985). Of strategies, deliberate and emergent. *Strategic Management Journal*, *6*(3), 257–272. doi:10.1002/smj.4250060306

Mirabeau, L., & Maguire, S. (2014). From autonomous strategic behavior to emergent strategy. *Strategic Management Journal*, *35*(8), 1202–1229. doi:10.1002/smj.2149

Noordegraaf, M. (2011). Risky business: How professionals and professional fields (must) deal with organizational issues. *Organization Studies*, *32*(10), 1349–1371. doi:10.1177/0170840611416748

Noordegraaf, M. (2016). Reconfiguring professional work: Changing forms of professionalism in public services. *Administration & Society*, *48*(7), 783–810. doi:10.1177/0095399713509242

Noordegraaf, M., van der Steen, M., & van Twist, M. (2014). Fragmented or connective professionalism?: Strategies for professinalizing the work of strategists and other (organizational) professionals. *Public Administration*, *92*(1), 21–38. doi:10.1111/padm.12018

Ocasio, W., Laamanen, T., & Vaara, E. (2018). Communication and attention dynamics: An attention-based view of strategic change. *Strategic Management Journal*, *39*(1), 155–167. doi:10.1002/smj.2702

Piening, E. P. (2011). Insights into the process dynamics of innovation implementation. *Public Management Review*, *13*(1), 127–157. doi:10.1080/14719037.2010.501615

Ridder, H.-G., Doege, V., & Martini, S. (2007). Differences in the implementation of diagnosis-related groups across clinical departments: A German hospital case study. *Health Services Research*, *42*(6 Pt 1), 2120–2139.

Shepherd, N. G., & Rudd, J. M. (2014). The influence of context on the strategic decision-making process: A review of the literature. *International Journal of Management Reviews*, *16*(3), 340–364. doi:10.1111/ijmr.12023

Sminia, H. (2009). Process research in strategy formation: Theory, methodology and relevance. *International Journal of Management Reviews*, *11*(1), 97–125. doi:10.1111/j.1468-2370.2008.00253.x

Tiemann, O., & Schreyoegg, J. (2012). Changes in hospital efficiency after privatization. *Health Care Management Science*, *15*(4), 310–326. doi:10.1007/s10729-012-9193-z

Veronesi, G., Kirkpatrick, I., & Altanlar, A. (2015). Clinical leadership and the changing governance of public hospitals: Implications for patien experience. *Public Administration*, *93*(4, SI), 1031–1048. doi:10.1111/padm.12183

Yin, R. K. (2014). *Case study research: Design and methods*. Thousand Oaks: Sage Publications.

Zimmerman, B., Lindberg, C., & Plsek, P. E. (1998). *Edgeware: Insights from complexity science for health care leaders*. Irving: VHA.

Table 1: Representative Supporting Data for Each Second-Order Code

Second-Order Codes	Representative First-Order Data
Tasks	• "The strategic positioning of the center is fixed in writing, there are rules of procedure for each center." • "I decide in which direction we want to develop further."
Decision Authority	• "The managing director is not only the 'speaker' of the medical center, he also has decision-making powers […] that is very important, because there's really a person in charge."
Resources & Administrative Support	• "We do not have extra budget or personnel […] the management tasks are included in our job." • "A project management unit was established in order to provide us with data and to coordinate things."
Procedures	• "There are a number of communication channels that ensure information flows in both directions." • "There is not really a formal procedure how to do it. You just have the experience and know how to prepare a topic."
Criteria	• "We […] have to cover our costs. The company as a whole comes first and strategic issues must always pay off." • "Relevant are profitability analysis, cost-benefit ratio, and black numbers."
Decision Making	• "You won't see a unilateral decision. In advance, there are constructive discussions so, in the end, there's a common position."
Boundary Management	• "… establish a certain corporate culture which emphasizes that it's all about togetherness and not about any territorial battles." • "The credo of the management is: There are no functions, there are only people."
Continuity in Leadership Positions	• "Most of our employees quietly retire." • "All our executives have been with the company for a long time."
Strategic Planning	• "The board of executives is very well organized. It operates, accepts suggestions, creates agendas, and also supports our topics."
Dominant Belief System	• "Many doctors have a problem with subordinating their activities to the economy, but I don't think so at all." • "A high-quality treatment […] automatically generates a positive contribution margin, which benefits the entire hospital group."

Figure 1: Overview of Data Structure

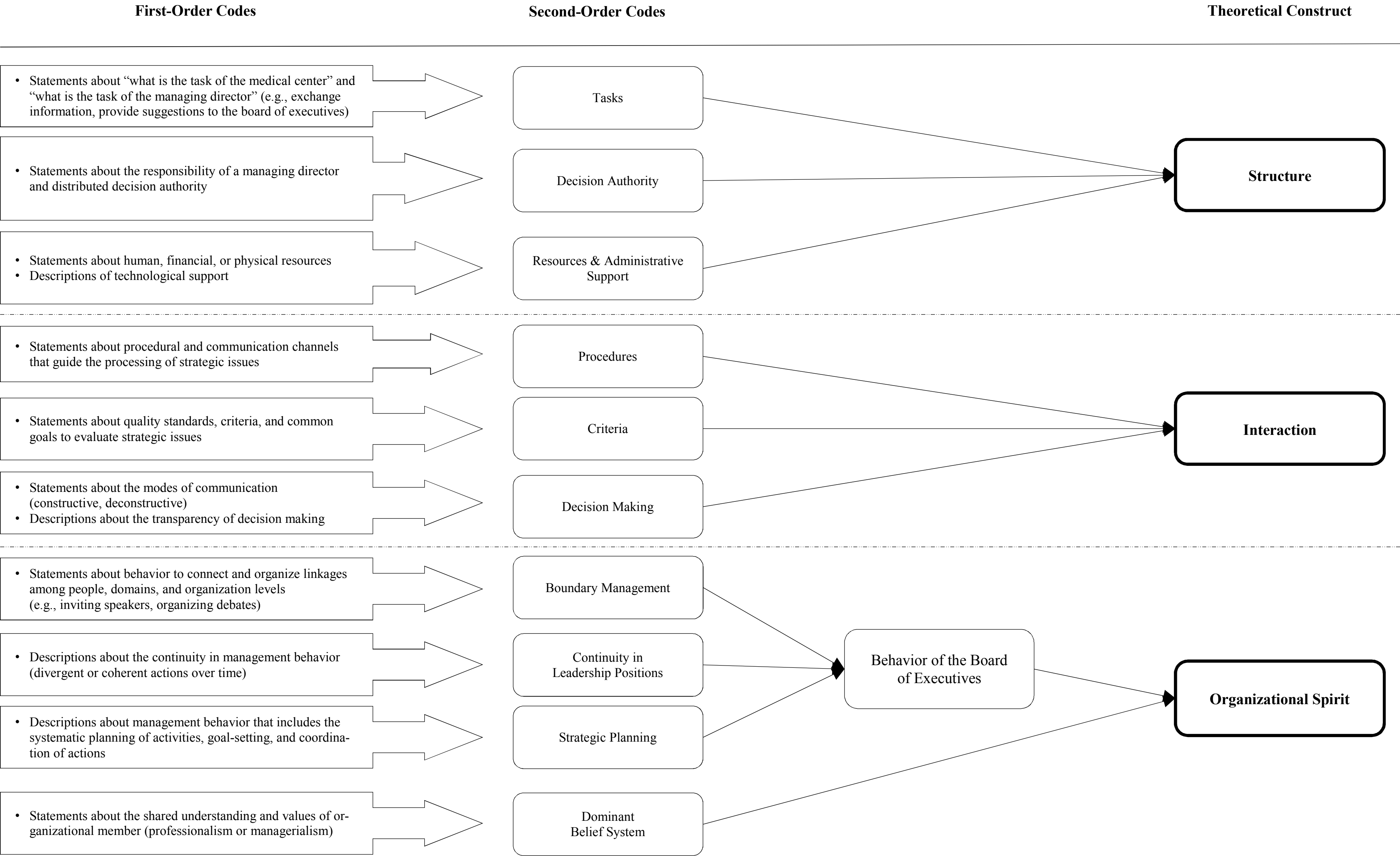


Figure 2: Comparison of the Two Cases by Constructs of Interest

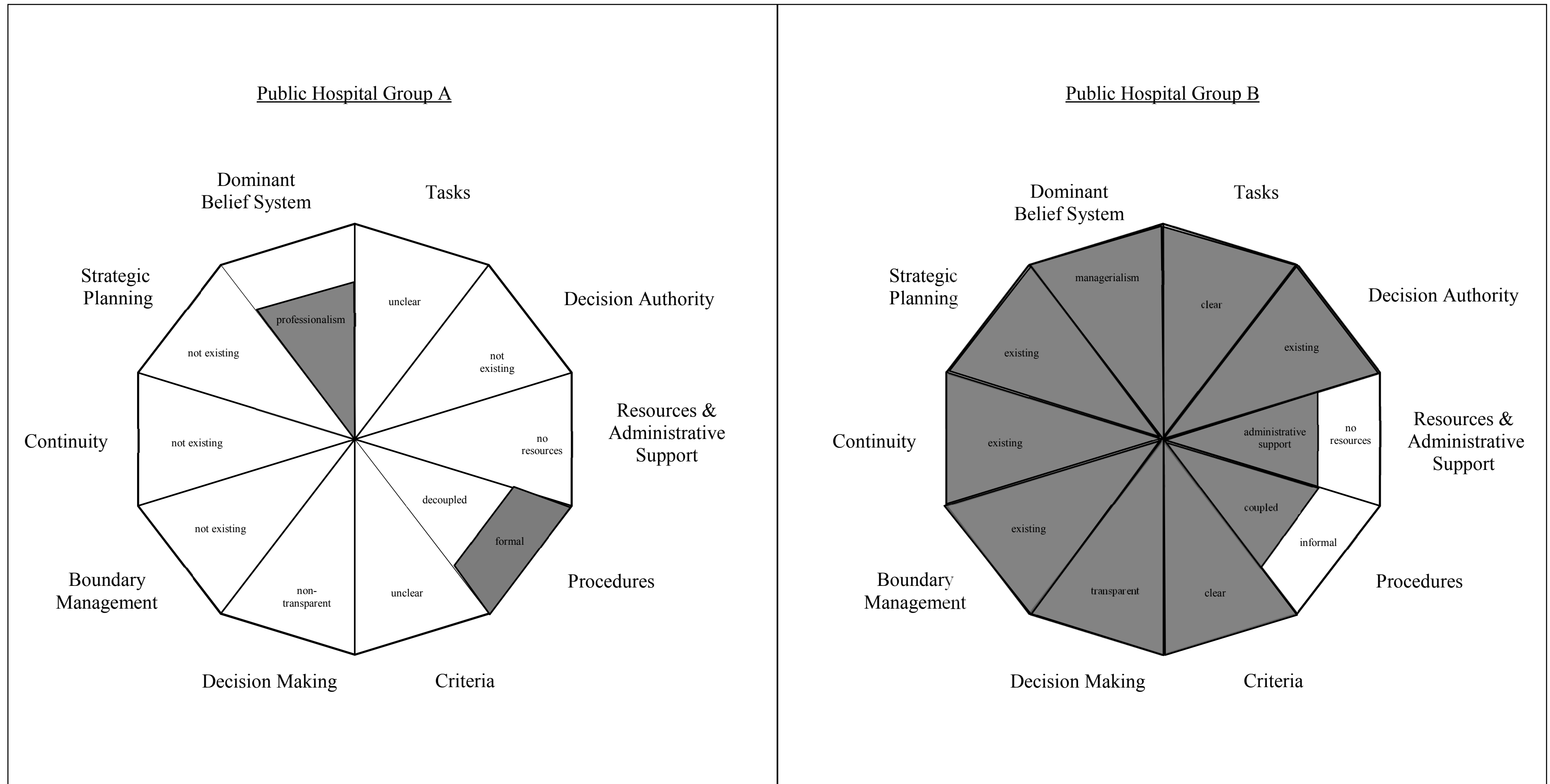


Figure 3: Theoretical Model of Strategy Formation in Hospitals