Governing strategy and knowledge: tools and methodologies

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Introduction to the JMG Special Issue

The recent affirmation of a knowledge-based view of the firm (Nonaka, 1994; Grant, 1996: Spender, 1996) stems from the increasing importance given to knowledge as the base resource to develop sustainable competitive advantage (Drew, 1999). For example, Zack argues that a firm's competitive strategy should be built around its knowledge-based resources, and that the actions a firm takes to manage knowledge gaps or surplus (e.g., building online document repositories, recruiting for particular skills) should be guided by a Knowledge Management (KM) strategy: "*KM strategy guides and defines the processes and infrastructure (organizational and technological) for managing knowledge. KM strategy typically includes broad generic components (e.g., emphasizing tacit vs. explicit knowledge, knowledge exploration vs. exploitation, or organizational vs. technical mechanisms for knowledge exchange) as well as those that are firm specific*". (Zack, 2002: 270)

It implied a revisit to the concept of Knowledge management (KM), leading to the distinction of 1st generation and 2nd generation knowledge management initiatives. The first generation of knowledge management concerned itself with the capture, codification, and diffusion of information, arguing that information is the raw material of knowledge and one has to start there. It emphasized the use of information and communication technologies as main vehicle, leading to a large variety of tools, instruments and approaches, ranging from internal bulleting boards, to corporate Yellow Pages of who knows what, to archiving and storing solutions. With the arrival of the second generation of knowledge management, emphasis has shifted towards the organisational aspects of knowledge. Having (permanent) access to knowledge and knowing who knows what, will only work when the overall organisation design allows, facilitates, and incentivates the sharing and the use of knowledge among its organisational members (Turchetti and Geisler, this issue). Consequently, the emphasis shifted from technology towards the context of (knowledge) use. This is not to say that technology stopped playing an important role but rather that its role became defined as a necessary but not a sufficient condition for competing on knowledge. The second generation of knowledge management typically addressing issues around (the design of) knowledge praxis, such as creating communities for knowledge sharing and emphasizing the social and networked interactions that form the base for effective knowledge creation, sharing, and utilization (Breuning and Hydle, this issue).

With the second generation of knowledge management, typical managerial issues arrived as well. For example, can knowledge sharing be incentivated and rewarded? Can it be measured in terms of its performance impact? How can be knowledge be integrated with the work organisation, job designs, and team- and project work? Of what do investments in knowledge consist beyond acquiring hardware and software? Is knowledge a capital asset that needs to be valuated, reported, and disclosed? What are the revenues and stream that can be identified with conscious deployment of the knowledge resource? In other words, how does knowledge affect the governance package of an organisation?

Several scholars have put forward proposals that attempt to demonstrate how to incorporate knowledge and knowledge conceptualizations, such as tacit-explicit, embedded-embrained, personalized-objectified, into methodologies and tools for strategy formulation (Hofer-Alfeis, 2003; Mentzas, 2004). Other scholars start out from an even higher conceptual level, arguing, for example, that "*the most critical element of corporate strategy is to conceptualize a vision about what kind of knowledge should be developed and to operationalize it into a management systems for implementation.*" (Nonaka and Takeuchi, 1995: 74). The initial choice of an entry point where to start problematizing knowledge for research purposes, has consequences for the subsequent trajectory of formulating research problem statements. For example, following Nonaka and Takeuchi's initial view, the first and foremost challenge to researchers and practitioners in knowledge management becomes to develop methodologies and tools for cognitive representation of knowledge, deliberately including the strategists' own mental models of knowledge. Another example, is the managerial perspective of knowledge. It starts out conceptualizing knowledge as a competitive resource on a par with other organizational resources, such as the financial resource and the human resource. Consequently, knowledge becomes yet another object that needs to be managed and made subject to a variety of managerial tools and instruments to render it productive (Cuccurrullo, this issue). An example of this line of thinking and argumentation, is represented by strategy maps (Kaplan and Norton, 2000); visual representations of strategy that support strategy implementation and, as a useful additional benefit, might result in developing a

coherent sense of (the organisation's) self (Spender, 2002). But that benefit is not set up as the main purpose of strategy mapping, which is implementation.

Our choice in this special issue is to start out from corporate governance and have a broader perspective on how knowledge is either deliberately design in or unexpectedly impacts and influences the high-level structure of organisational processes. This goes beyond knowledge management and looking at knowledge as a thing that requires management and, thus, identification, capture, measurement, and utilization. Rather, it looks at knowledge as a series of processes, some of which are above the waterline of day-to-day management and recognized in their presence and acted upon, but also a series of processes that flow throughout the organisation under the waterline of observation and action, and occasionally appear and make their presence felt in wholly unsuspected ways (Frigotto, Coller and Collini, this issue).

The latter has two implications: first, that knowledge is randomly considered 'a problem' and acted upon as a local, punctual, and one-off phenomenon that has to be dealt with using existing mindsets and action frames. Knowledge appearances become 'surprise acts' and challenge the existing status quo. Typically, this results in case study (war stories?) that illustrate unexpected causalities that, typically, are of a cross-functional nature and require higher-level, simultaneous and concurrent managerial interventions across different process areas (Lionzo and Rossignoli, this issue); for example, changing organisation structure, developing alternative incentive systems, deregulating or loosing up standard operating procedures, and changing reporting flows and formats, all simultaneously and concurrently intervened upon.

The second implication of knowledge processes that suddenly and unexpected appear above the waterline, is the attempt to take a step back and move to a larger framework of interpretation and categorisation that is willing to act as a sort of 'standard system of elements' similar to what is used in Chemistry. Even when not all elements have been found or fully known for each one's characteristics and effects, the system of elements is valid as a larger framework problematizing the field, i.e., to answer the ontological issue of which (knowledge) research problem belongs where.

Our contention is that corporate governance acts as such a larger 'system of elements', allowing us to look at the various occurrences of knowledge, both deliberate and conscious and unexpected and emergent, and interpret which research problem statement goes where. For example, does it affect the structure of governance, the processes of governance, the tools and implementation of governance, does it change the type of governance structures and processes?

This special issue aims to collect contributions addressing the concrete interplay between knowledge and governance. The relationship between knowledge and governance is addressed, assessed, and articulated in quantitative and qualitative papers, each of which state their ontological assumptions (how do we conceive knowledge?) and then continue to show how knowledge impacts aspects and components of corporate governance. This does not mean that the term 'corporate governance' is mentioned on every page of every paper. Rather, conclusions and discussions are uncovering causalities in the interplay between knowledge and corporate governance, and do so mostly in terms of managerial themes.

The papers published in this special issue follow the above line of argument. We are very happy that Robert Grant accepted our invitation to write a paper outlining the relationship between the knowledge-based view of the firm and organizational capability. Grant's paper describes the present understanding of governance of the knowledge-based firm, incorporating findings of the most recent research studies, and highlighting the role of the coordination of the knowledge resource.

Following Robert's paper, the paper by Breunig and Hydle addresses the same aspect of coordination, using a longitudinal case study of globally distributed knowledge work in a team-based, professional service firm. Their complements coordination with the address of performance measurement, indicating the short-term and long-term impacts on knowledge-based value creation, and illustrating governance in a globally distributed, full knowledge-centred firm.

In turn, the paper by Breunig and Hydle is complemented by two papers; one by Lionzo and Rossignoli and one by Frigotto, Coller and Collini. The paper by Lionzo and Rossignoli illustrates learning in a knowledge-based firm, based on a comparative case study of three family-owner SMEs, addressing the role of governance in family-owned firms. The paper by Frigotto, Coller and Collini takes a step back and looks at the broader management control systems that are related to knowledge strategies, using a contingency perspective. Illustrated by a longitudinal case study, they take up the aspect of the dynamics of the reciprocal learning fit between management control systems and strategy, and how both evolve over time driven by the

organization's knowledge identity. Governance, thus, is addressed as a result of the evolutionary and dynamic interplay between strategy and control.

The paper by Cuccurrullo continues on the argument of coordination but, as compared to the paper by Frigotto, Coller and Collini, is more focused on the strategy component. Based on an etnographic study of academic medical centers, coordination of pluralistic organisations is driven by the practices used, and its conclusion resonates strongly with the learning dynamic present in the preceding papers by Breunig and Hydle, Lionzo and Rossignoli, and Frigotto, Coller and Collini. The aspect of governance and pluralism, also present in the afore-mentioned preceding papers, has been brought to the fore and discussed explicitly.

Finally, the paper by Turchetti and Geisler harks back to the 1st generation of knowledge management perspective, and addresses how the nature of knowledge itself constitutes a requisite design criterion for the organization. As such, the paper illustrates the transpondence from the first to the second generation of knowledge management, and is based on the perception of knowledge as a cognitive phenomenon. Learning, thus, takes place within technical solutions as well as in corresponding organizational solutions, resonating with the paper by Frigotto, Coller and Collini. Governance is addressed from a (deliberate) design perspective, including the managerial implications.

This special issue had a long gestation period, ever since the JMG-sponsored conference of the same name, was held in Venice in 2008. The paper by Lionzo and Rossignoli is the visible remnant from that conference. Following a call-for-paper issued after the conference, we received 25 submissions, of which 16 were desk rejections due to incompatibility with the theme of the special issue. Of the 9 papers entered into the review process, 5 papers eventually were accepted. The review process consisted in the majority of 6 papers of triple-blind reviews, involving reviewers from a very diverse set of academic disciplines, in an attempt to do full justice to the interdisciplinary nature of many of the papers.

We gratefully acknowledge the diligent work and insightful comments of the reviewers, several times amounting to very substantial developmental reviews; without the below-mentioned scholars and peers, this special issue would not have been possible – thank you!

Suggested sequence of papers:
1. Introduction by guest editors
2. Invited paper by Robert Grant
3. Bruening and Hydle
4. Lionzo and Rossignoli
5. Frigotto, Coller and Collini
6. Cuccurullo
7. Turchetti and Geisler

Breuning and Hydle - *This article examines the governance of globally distributed knowledge work. To measure performance in knowledge work, it is important to focus on what the knowledge workers do and hence view knowledge as something one does, namely the practices, instead of something one has. By following the practices of knowledge work, it was possible to evaluate the effect of measures related to organizational processes, and identify what was not well covered by the measurement tool. Strategic and long term needs such as learning and employee competence are better managed through projects. This article shows how work performance in international organizations needs two different measures: one tool for measuring short-term value creation linked to the organizational processes; and, one tool for measuring long-term value creation linked to the practices of service work made in projects. Global governance of distributed employees is therefore successfully managed through key performance measures and through understanding projects through their multiple contributions, at both an individual and an organizational level. Global long term governance needs are strategic for the entire firm. The paper rests on an in-depth empirical case study of an international professional service firm.*

Lionzo and Rossignoli - *This article explores the process of learning and strategic change in small and medium-sized family firms (family SMEs). Organizational learning theory posits that knowledge must be integrated throughout the firm to facilitate strategic renewal. This process occurs in a particular way in family SMEs, according to their specific characteristics. In such firms the family's role, the company size and the lack of formal procedures and systems strongly affect the process of learning and change. The study applies the 4I model of organizational learning to three case studies and offers empirical support for this model. The article has theoretical implications for variants of the 4I model as applied to family SMEs, and implications for practice related to the family's role in starting and perpetuating the process of learning and change.*

Frigotto, Coller and Collini - *In this paper we discuss the Management Control Systems (MCSs) – strategy relationship in the light of an empirical analysis. We debate the attention to the fit of MCS and strategy at given moments in time which is typical of a contingency approach, and we search for an understanding of the dynamic evolution of the company over a continuous span of time. We deploy a diachronic analysis which involves a vertical and a horizontal conception of dynamics. We show that instantaneous fit between formal MCS and deliberate strategy is not helpful in illustrating evolution, nor is able to explain success. Conversely, the fit is to be played continuously on MCS and strategies at the level of practices. However, we also show the role of misfit between MCS and strategy: ambiguity implies the definition of blurred constraints for action which is freed. In this sense, we conclude that in the design of the MCS or strategy, attention does not have to be focused on the reciprocal fit, but rather on the ability of both (MCS and strategy) to support the exploration of new directions of evolution. Our case offers the intuition that identities, beyond practices, account for success in this case, as they embed both practices but also a way of being that, as a set of basic principles, directs behaviour when practices are missing, i.e. in the face of the new.*

Cuccurullo - *Pluralism in organizations is dramatically and progressively increasing today, which makes it difficult for managers to capture a clear picture of what is really going on at the moment and to make strategic decisions. How strategy is formed and implemented in pluralistic contexts has been substantially underestimated for many years. This article investigates how specific strategy processes are constructed and which practices can be successfully adopted in pluralistic contexts, such as in Academic Medical Centers. We drew from a strategy as practice approach and adopted an ethnographic methodology to conduct the study. This paper demonstrates that some practices (strategy workshops and brutal facts, quantitative analysis and graphic charts) can reduce the risks of setting the strategy agenda in pluralistic organizations. Implications for managers and scholars are discussed.*

Turchetti and Geisler - *The structure of knowledge systems is a crucial component of the effort to make these systems effective and acceptable to users. This paper argues that the structure must correspond with the nature of knowledge, as the externalization of cognitive phenomena, in the form of intellectual nuggets that include topics, stories, concepts, and images. Lessons from the structuring of organizations suggest that the platform and the matrix approaches could be adopted in the design of knowledge systems. The paper then describes the advantages and limitations of these solutions.*

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