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# **Knowledge Management and Organizational Learning**

## **Volume 4**

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# Emergent Knowledge Strategies

Strategic Thinking in Knowledge  
Management

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## Foreword

The notion of knowledge is not new as well as its relevance for human beings as a means of survival and prosperity. A famous science-fiction film produced and directed by Stanley Kubrick “*2001: A Space Odyssey*” (1968) provides a good metaphor to point out the role and relevance of knowledge for society. The film starts with scenes of a tribe of ape-men, living in an African desert millions of years ago, which awakens to find a mysterious black monolith that has appeared before them. This monolith becomes their starting guide to learn how to use a bone as a weapon and, then, to get tools and methods to compete with their rivals and drive them away from the water hole, i.e., the source of their survival. The monolith is an exceptional metaphor to depict the role of knowledge for the human evolution. Knowledge is the key driving force of human life as well as of any transformational endeavors of our world. The capacity of creating, retaining, revising, applying, and projecting knowledge is at the basis of human being’s survival, development, and progress. Human society has progressed by learning and embedding knowledge into whatever tangible and intangible entity is surrounding us. Every artificial object—as well as any notion of human inner or outer reality—is made of and it is the result of knowledge. This premise represents the underlying fundamental assumption of this book which offers a journey through nine chapters toward the analysis of knowledge, its strategic role, its use, and its strategic managerial deployment and exploitation to navigate the ever-increasing complexity of today’s business landscape. It provides an important contribution to the management literature for both scholars and practitioners, by addressing two key conceptual pillars that advance the managerial understanding of how to manage and assess the knowledge-based drivers of organizational value creation mechanisms. Knowledge strategies and strategic thinking are proposed as two critical dimensions characterizing knowledge management.

In their authoritative book, Ettore Bolisani and Constantin Bratianu provide a clear outlook of the state of the art of the key conceptual pillars at the basis of the discipline of knowledge management. It represents a valuable resource both for scholars and for practitioners. Indeed, “what,” “why,” and “how” of knowledge management are thoroughly discussed. Although knowledge is not a new concept, it is fundamental to address and understand its meaning in the organizational and business context. Managers, in principle, are interested in knowledge not for the

sake of knowledge but for the implications that managing knowledge can generate in terms of organizational performance improvements and value creation mechanisms. The understanding of “what” equals to clarify what is knowledge as an object whose relevance for managers and organizations is related to its role as a source and a resource of organizational wealth creation. Acknowledging the power of this concept, Bolisani and Bratianu point out that its definition is still very elusive. Different disciplines can concur to the definition of knowledge, ranging from social sciences to information theory, gathering the insights coming from philosophy, psychology, neurology, and sociology. All these disciplines can provide important perspectives of the notion of knowledge pointing out some specific features and traits, rather than disclosing its characteristics and building blocks components. From a managerial point of view, what matters is that knowledge is a strategic resource and source of company value creation and therefore is an organizational asset which acts as a fundamental strategic driver of competitiveness. In addition, since managers are interested in the practical implications of the deployment and exploitation of knowledge, they need conceptual tools to handle the notion of knowledge. From this point of view, the use of metaphors and of the metaphorical/analogical thinking, as proposed in this book, is of great relevance. The understanding of knowledge is the first step toward its use as a “strategic weapon” as proposed by Bolisani and Bratianu. This relates to the understanding of “why” knowledge management is necessary. Why organizations should increasingly be focusing their attention on managing their knowledge domains? The authors provide a clear explanation of the reasons that make knowledge a fundamental organizational value driver. Today’s business context is characterized by increasing ambiguity, uncertainty, unpredictability, complexity, and turbulence, which make, overall, the business landscape in which organizations have to navigate more and more chaotic. In such a context, knowledge represents a critical success factor to survive and to drive growth. The acknowledgment of the knowledge-based nature of today’s economy and of organizations points out that knowledge workers and knowledge processes are at the basis of organizations’ competitiveness, and knowledge management is a necessary dimension connecting operations and strategy in order to translate knowledge into organizational performance, value outputs, and impacts. However, the ability of an organization to prosper is linked not only to its capacity of managing and developing its knowledge resources but most importantly to the identification of those cognitive resources that have strategic relevance for the future success of the organization and for this reason denote its knowledge assets. Indeed, knowledge assets contribute to the definition of the value of an organization from both a static and a dynamic perspective. From a static point of view, knowledge assets, such as patents, brand, culture, core competences, identity and image, and so on, stand for most of the market value of today’s company. The notion of intellectual capital has been introduced in the management and economic literature to represent those assets explaining the difference between market value and book value of today’s knowledge-intensive companies. On the other hand, and most importantly, knowledge assets define the roots of value creation dynamics. They are the value drivers

to execute organizational processes that, in turn, explain organizational performance. The strategic management of knowledge assets, as discussed by Bolisani and Bratianu, is the way managers can attempt to understand the future. In particular, the authors propose the notion of knowledge strategy indicating that organizations should explicitly adopt a strategy to manage those knowledge assets affecting actual and future performance. This involves the definition of knowledge management initiatives as strategizing planned actions connecting business strategy and everyday operation management. The formulation and implementation of a strategy define the route that an organization's leadership undertakes to navigate the business landscape by coping with an unknown world and by continuously projecting and revising strategic objectives to be achieved. In order to operate, organizations need to develop their knowledge domains that in turn define organizational capabilities, skills, and competences. Knowledge strategies are aimed to maintain and develop organizational knowledge.

Although knowledge management is still not fully acknowledged as a mainstream managerial discipline with business schools dedicating courses on the subject, it represents a fundamental management and economic research area with fundamental implications to understand organizations, their working mechanisms and value creation dynamics, and the ways how organizations interact and shape the business landscape. This book, taking mainly a strategic viewpoint, reminds us that the real managerial relevance of knowledge and knowledge management is connected to the function of knowledge as an organizational value-driven source. Organizations are primarily in the business of knowledge and on their capacity of managing knowledge depends their future business sustainability and value creation capacity.

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## Introduction

For various reasons, this is an experimental book. First of all, it is experimental because it focuses on a topic—knowledge strategy—which is not new but still quite debated and controversial. Indeed, knowledge has long been accepted as a strategic asset to achieve and maintain competitive advantage. Drucker's (1969) anticipatory vision of a society, where traditional economic factors (i.e., land, labor, and capital) are complemented (or in some way replaced) by knowledge, has now become a reality: today is the age of the *knowledge economy* (Powell and Snellman 2004). There are new ways of considering labor, capital, and also technology. New models of the firm (Grant 1996; Senge 1990) become necessary. Novel challenges are posed to executives and decisionmakers. Intellectual capital and knowledge management (KM) gain their place in the practice of companies and in managerial research (Nonaka and Takeuchi 1995; Spender 2015; Davenport and Prusak 2000).

However, the notions themselves of both knowledge and strategy are quire unstable. Knowledge is an abstract concept, very powerful indeed, but without any reference to the tangible world and no clear definition so far. A popular view of knowledge, at least in the managerial disciplines, is that of “justified belief” (Nonaka and Takeuchi 1995). While this definition stems from earlier philosophical thinking, we should also consider that truth and its justification are, quite often, a matter of interpretation. So, there do exist different variations in the way we can see knowledge and represent it, depending on the particular context or situation.

As regards strategy, the term is one of the most frequently used in business, but, again, its definition is sort of dynamic. Apparently, it is clear that a strategy is important, especially because it resonates its military origins: we decide a vital goal and establish an appropriate way to achieve it. However, the possibility to do that—and, therefore, the usefulness itself of talking about a strategy—is influenced by some evident limitations. First, a strategy is intrinsically oriented toward an unknown future, and here the great impact of uncertainty has long been recognized (Mintzberg and Waters 1985). Second, those who formulate a strategy are not omniscient, and their capabilities are limited. So, a strategy is more a desired vision of the future rather than a rational formulation of a pathway to follow. As can be easily discovered in the managerial literature, the notion of strategy has changed over time, as a consequence of the challenges posed by the changing economic



climate and, also, by the advancements in the theoretical reflections about the nature itself of strategic thinking.

In any case, it can be argued that the concept of knowledge is strictly intertwined with that of strategy: knowledge is not only an essential ingredient for formulating and even considering the idea of a strategy, but knowledge can also be the *object* of a strategy. In other words, there is increasing awareness that, for companies, it may be important to consider the new idea of a *knowledge strategy*.

Knowledge strategy is a concept that has started to become popular in the managerial literature only recently (Zack 1999) and mainly due to the upsurge of knowledge economy and the diffusion of knowledge management programs. While knowledge has always been a recognized ingredient of strategic formulation (as we mentioned, for deciding a strategy, we must *know* something), the notion of knowledge strategy means more. It suggests that a company should adopt a strategy to *manage its knowledge*. So, in addition to planning the production and delivery of products and services, deciding goals regarding profits and markets, and expressing objectives about competitive positioning, a knowledge strategy represents the effort to plan activities of KM and, more generally, to organize all resources and processes that, in a company, are devoted to developing knowledge and competences of people, boosting learning processes, and facilitating storage, sharing, and reuse.

Knowledge strategy is, however, a complex concept because it is a combination of two other complex concepts, i.e., knowledge and strategy. So, when it comes to defining appropriate approaches to formulating and implementing a knowledge strategy, everything becomes hard. This well explains why, at the beginning of this introduction, we declared that our book is experimental: it is about fluid concepts that still need to be stabilized in their boundaries and significance and clarified about their actual applicability.

But our book is experimental not only because of the topic but also because of the approach. We don't have an ultimate definition of knowledge strategy, nor we want to impose one. Rather, our purpose is to stimulate discussion and reflection in all those who may share the interest in this issue with us: researchers, practitioners, or students. We would like to discuss the state of the art of the debate on the topic, present and compare the various positions and viewpoints with an open-minded attitude, and, especially, we want to show how the notion of knowledge strategy is indeed complex, but its consideration and even application can provide food for thought to researchers and practitioners and can suggest new models and responses to the difficult challenges posed by our fast changing societies.

So, our real purpose is to stimulate the debate on what we consider a fascinating and fruitful concept and (possibly) to inspire others so that they can reach greater advancements in this field. Our modest ambition is simply that our book can be a honest contribution in this direction.

Although the whole volume centers on the concept of knowledge strategy, we decided that, to facilitate the reader, each chapter treats a specific point and has a separate list of references. Therefore, chapters can be read in sequence, or independently from one another: To help the reader in this, significant definitions and essential notions are often repeated in the various chapters, when they are important

to understand the specific content. Chapter 1 introduces a discussion about the elusive notion of knowledge, which is, indeed, the starting point of our analysis. The intention is to show the most significant aspects of the dispute over the definition and the main conceptual barriers in that endeavor. Next, we show how knowledge has often been defined by using metaphors, and this approach has important implications also in the practical interpretation and use.

Chapter 2 focuses on KM, which rapidly became a sort of necessity in the postindustrial society and in the knowledge economy. However, we adopt a heterodox approach: instead of starting from defining KM, describing its functions, and, in the end, proposing a prescriptive framework, the chapter depicts the broad picture of the changes in the structure of the economy, where tangible resources are increasingly replaced by intangible resources as the main production factors. The new attributes of knowledge workers and knowledge processes that become vital in knowledge-based organizations are then discussed. So, since knowledge and its functions constitute strategic resources, knowledge management bridges the gap between operational management and strategic management for knowledge-based companies.

The purpose of Chap. 3 is to explore the uneasy connection between knowledge and strategy. Knowledge is increasingly considered a fundamental strategic weapon for value creation, especially due to the increasing turbulence of the business environment. This soon brings us to the idea of a strategy as a means of realizing it. A discussion about the notion of strategy is then provided, and we will show how this notion has evolved over time as a result of a new equilibrium of forces between internal and external business environment. Here, knowledge has always been a central element in all the various perspectives on strategy and strategic thinking that can be found in the literature and in the managerial practice of companies.

As we said before, strategies imply a vision of the future: they are built for future actions, and so understanding the nature and the content of future becomes important. In Chap. 4, we discuss our perception of time and we show how we understand the concept of future within the framework of time, complexity, and uncertainty. Human mind developed, during its historical existence, a series of metaphors able to suggest new semantic dimensions of time and its role in structuring the future. Due to the complexity of the future, it is also important to explain the way we correlate variables describing events and phenomena that we would like to predict for future decisions. This also means to explore the paradigms of linearity and nonlinearity or, in other words, the different views we can adopt to connect past and future and ground our forecasts. Finally, we present the semantic dynamics of uncertainty: uncertainty has an unavoidable role in defining probable futures, and the literature of business management has long considered uncertainty in the definition of strategic objectives and in the design of strategies able to achieve them.

The second part of the book addresses its core topic directly. Chapter 5 treats the notion of knowledge strategy. In addition to the classic elements of a strategy in a company, a knowledge strategy represents the effort to plan activities of knowledge management and, more generally, all resources and processes that are devoted to developing knowledge and competences of people, boosting learning processes, and facilitating storage, sharing, and reuse. As the chapter shows, the definition of

knowledge strategy is difficult, and it is still necessary to clarify its contents and boundaries. In addition, there is the need to explain if a knowledge strategy is just a part—or a derivation—of classic strategic formulation of companies, or if it must have a special and distinct place that also deserves specific approaches and methods.

Considering knowledge strategies also leads to another point: how can a knowledge strategy be planned and formulated? What approach can be more appropriate? Chapter 6 focuses on *strategy formulation*, i.e., the process of formulation of a strategy for a company. As we will have learned in the previous parts of the book, the intrinsic presence of sources of uncertainty and turbulence finally affects the way strategy formulation can be approached consistently. And so, the introduction of the notion of knowledge strategy poses additional challenges. Can it be of some help for strategists, or does it just add new complications to strategy formulation? How can a knowledge strategy be formulated? Is its formulation related to the usual processes of strategy formulation, or is it somewhat special? And how is the formulation of a knowledge strategy related to that of a company's general strategy? All these questions are treated in this chapter. Particularly, the so-called deliberate or rational approach to knowledge strategy (and, more generally, to strategic planning) is discussed, as well as its limitation. The idea of knowledge strategy as an “emergent strategy” in companies (which also explains the title of the book) is then presented. Finally, we propose a way to integrate both the approaches to strategy and knowledge strategy (i.e. deliberate/rational and emergent), for better fitting the challenges of a dynamic, turbulent and uncertain environment.

To formulate a knowledge strategy, it may be useful to adopt some standard references. In classic textbooks of strategic management, different possible strategic options are named and classified in general terms, so that they can serve as a basic starting point for strategic design and formulation in real companies. This is exactly the same approach that is proposed in Chap. 7, which focuses on *generic knowledge strategies*. In substance, the chapter proposes a review of the literature, where a number of standard options have been analyzed, classified, and named appropriately. So, this can help strategists to become more aware of the role of knowledge strategies in companies and to formulate their own strategy based on variations and adaptations of one or more generic knowledge strategies. The generic knowledge strategies presented in this chapter are the following: exploitation strategies, acquisition strategies, sharing strategies, and exploration or knowledge creation strategies. The readers who are more familiar with knowledge management will immediately recognize these classic terms, which are becoming quite popular in the field.

Finally, Chap. 8 treats an apparently disjointed topic—that or measurement—which is, however, integral part of strategic management: it is generally assumed that we need a method to measure the strategic performances that define our goals, to control the implementation of a strategy, and to assess its final success. So, when it comes to knowledge strategies, we may say that we need a way to measure strategic performances related to knowledge. This means we need some measurement system that can be applied to knowledge and knowledge management. But if and how it is possible to measure knowledge is still questionable. Many techniques

have been proposed, but they are far from becoming an established practice, and even a *rationale* to treat the problem still lacks. The chapter gives some order to this much debated issue and analyzes the theoretical and methodological soundness of the various measurement techniques.

In concluding this presentation, a few words of acknowledgement of all those that made this book project possible. First of all, Springer's team of Editors and Editorial Assistants, who have supported it with their proactive help. Second, we gratefully thank many of our co-members of the International Association for Knowledge Management for the feedbacks and reviews they provided in various moments of this long and complex project. Particularly, we would like to thank our colleagues and friends Meliha Handzic, Coeditor of the Book Series, for her warm encouragement and support, and Giovanni Schiuma, who kindly wrote the foreword. Finally, we can't forget our beloved Families, who—as usual—didn't miss to provide their support and encouragement even in the hardest times of work.

## References

- Davenport, T. H., & Prusak, L. (2000). *Working knowledge: How organizations manage what they know*. Boston, MA: Harvard Business School Press.
- Drucker, P. F. (1969). *The age of discontinuity*. Piscataway, NJ: Transactions Publishing.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122.
- Mintzberg, H., & Waters, J. A. (1985). Of strategies, deliberate and emergent. *Strategic Management Journal*, 6(3), 257–272.
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford: Oxford University Press.
- Powell, W. W., & Snellman, K. (2004). The knowledge economy. *Annual Review of Sociology*, 30, 199–220.
- Senge, P. (1990). *The fifth discipline: The art and science of the learning organization*. New York: Currency Doubleday.
- Spender, J. C. (2015). Knowledge management: Origins, history, and development. In E. Bolisani & M. Handic (Eds.), *Advances in knowledge management* (pp. 3–23). Berlin: Springer International Publishing.
- Zack, M. (1999). Developing a knowledge strategy. *California Management Review*, 41(3), 125–145.

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