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Knowledge Management

Value Creation Through Organizational Learning

Second Edition

Springer

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The ability to create and maintain the knowledge infrastructure, develop knowledge workers and enhance their productivity through creation, and nurturing and exploitation of new knowledge will be the key factors in a nation becoming a knowledge superpower.
–APJ Abdul Kalam, (Former President of India)

Prologue

On the path towards a knowledge-based society, organisations – firms, public institutions, non-governmental organisations – increasingly face the challenge to mobilise knowledge resources for creating value in a sustainable manner. The transformation towards a digitized economy and society deeply changes how we manage information and knowledge, how we connect, collaborate, learn and decide within and across organizations. While digitalization offers new opportunities for disruptive renewal; knowledge workers, managers and organizations will have to recreate their governance, leadership, innovation, knowledge and learning processes and practices as well as their work organization. New business models and digitally enabled co-creation emerge, requiring new ways of managing knowledge.

This book aims at providing an overview of the fields of knowledge-based management as well as offering guidance for the implementation of knowledge management.

As the fruit of more than twenty years of research and consultancy projects carried out by both authors, this is the first textbook to bring together perspectives and practices on knowledge-based value creation from all continents.

It is intended not only for academic education but also to provide guidance to managers, business consultants, trainers, coaches and those interested in learning about organisations in a knowledge economy. While the main focus of this book is on businesses, many of the approaches, methodologies and tools explained are also applicable in public administration and non-profit organisations.

This book also presents «state-of-the-art» theory and practice. Many case studies, examples, questions, assignments as well as easy-to-use knowledge management tools at the end of each chapter make this work a compendium for learning and for implementing knowledge management initiatives.

This book begins with an «*Introductory summary*».

Chapter 1 deals with the changed environment of competition in knowledge-based societies and increasingly digitalised economies, and a self-assessment invites the reader to evaluate their own organisation.

Chapter 2 explains what knowledge means in organisations and clarifies the relation between information, knowledge and competitiveness.

Chapter 3 addresses the issue of finding the right organisational form to enable organisational learning, innovation and «boundaryless» knowledge flows. By using several case studies, different forms of organisations are described from the viewpoint of knowledge structure and knowledge transfer.

Chapter 4 underlines the significance of people for the knowledge of an organisation, and focuses mainly on future working methods in knowledge firms as well as new perceptions of roles of knowledge workers 4.0.

Chapter 5 concentrates on strategies for managing knowledge and offers an explanation of the «knowledge market» concept.

Chapter 6 is devoted to knowledge management in such different contexts as managing knowledge across cultures, countries and regions as well as in small businesses and the public sector.

Chapter 7 concentrates on how information and communication technologies associated with the digital transformation can support knowledge work.

Chapter 8 addresses the issues of intellectual capital reporting and how to protect and safeguard the knowledge of an organisation.

Chapter 9 provides guidance on implementing knowledge management initiatives in practice and on fulfilling the KM requirements of ISO 9001:2015 in particular.

This book discusses knowledge management predominantly from an organisational and business perspective, but for those readers who are interested on a knowledge worker and leadership perspective based on Peter Drucker's thinking, we recommend *North and Gueldenberg: Effective Knowledge Work: Answers to the Management Challenge of the 21st Century (Emerald Publishing)*.

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Spring 2018

Introductory Summary

«L' entreprise est le lieu où s'organisent les savoirs et les intelligences individuels en une intelligence collective créatrice capable d' entreprendre»
Jacques Morin
(The enterprise is the place where individual knowledge and intelligence converge to form a collective and creative intelligence capable of undertaking entrepreneurial actions)

We have tried to encapsulate the essence of this book by providing brief answers to the following ten questions regarding knowledge-based management.

— Why is «knowledge» and knowledge management a hot topic of discussion today?
— What is the relevance of knowledge as a competitive factor?
— What does «knowledge» of an organisation actually mean?
— Is it possible to measure knowledge?
— What is knowledge management?
— What are the hurdles in the creation and use of knowledge?
— How to promote knowledge sharing?
— How can an enabling environment that promotes knowledge flows be developed?
— How can processes and structures be organised to support a «knowledge market» in a company?
— How should an organisation begin with the introduction of knowledge management?

1. Why is «knowledge» and «knowledge management» a hot topic of discussion today?

With globalisation and digitalisation firms, public institutions and non-governmental organisations realise that sustaining competitive advantage or reaching goals requires tapping the full creative potential and knowledge of all members of the organisation. The business environment is transforming from that which was largely dominated by physical resources to one dominated by knowledge. Companies are increasingly designing products and services which are a result of and collaboration within and across organisations. Quick organisational learning and agile processes are required to find adequate answers to faster changes in the markets and higher speed of innovation, resulting in fall in prices, shorter product lifecycles, personalisation of customer needs, establishment of new business areas, etc. For this purpose, it is necessary to mobilise all relevant knowledge resources. Traditional potential for rationalisation and differentiation have to a large extent been exhausted. However, «knowledge» as a resource still retains rationalisation potentials

(e.g. by transferring best practices) and differentiation potentials (e.g. by combining knowledge). The developments in information and communication technology offer the option of dealing with huge volumes of information at low cost, allowing people to collaborate with each other even over long distances, and so facilitate co-creation, decision support and the exchange of knowledge (see ▶ Chap. 1).

2. What is the relevance of knowledge as a competitive factor?

The specific set of knowledge and competence of organisations supports their ability to offer unique products and services and enables operational effectiveness in creating customer value. The intelligent use of knowledge about customers enables the management of individualised customer journeys by recognising the customer's present and future needs. Having knowledge about competitors and other innovative organisations helps to learn from them and position itself accordingly. Productivity and quality increase by process know-how and transfer of «*best practices*» within and across the company. A transparent presentation of the «*intellectual capital*» makes a company more attractive to investors. Thus, a company can achieve long-lasting competitive advantages, especially if its knowledge is difficult to be copied or transferred. This applies to know-how of employee teams, patents, personal and organisational networks as well as to organisation structures that promote cooperation and exchange of information. An organisation's ability to learn and discard irrelevant knowledge – i.e. to learn and unlearn – is of great importance in this age of knowledge-intensive activities (see ▶ Chap. 2).

3. What does «knowledge of an organisation» actually mean?

Knowledge can be classified as explicit and tacit. Explicit knowledge is formal and structured and can be codified to be shared, while tacit knowledge is experiential, consisting of lessons learned while executing tasks/projects and insights gained from continuous problem resolution. Among other things, knowledge is comprised of patents, processes, technologies, abilities, skills and experiences of employees, and information about customers, markets and suppliers. Knowledge is developed in a specific context and cannot be considered in an isolated form. It is people specific and its availability or existence is unknown in many cases. For example, even if a painter precisely explains to us how he has made a certain painting, we are unable to reproduce the same painting. The result of this complexity of knowledge is that it cannot be completely stored and transferred detached from people. Knowledge is not «*frozen food*» that can be randomly stored, broken down and transferred. It is like preparing fresh food and learning from it every time; knowledge is the process of knowing (see ▶ Chap. 2).

4. Is it possible to measure knowledge?

«What cannot be measured cannot be managed» is a frequent saying in management. Therefore, some organisations structure their «*Intellectual Capital*» and have started to experiment with Intellectual Capital Reporting and to develop indicators that refer to customers, employees, processes, innovations and finance capitals. The «*Balanced Scorecard*» of Kaplan and Norton also helps in evaluating knowledge and learning associated with objectives and processes. However, at present, there is no comprehensive methodology for measuring organisational knowledge (see ▶ Chap. 8).

5. What is knowledge management?

Knowledge management enables individuals, teams and entire organisations to collectively and systematically create, share and apply knowledge to achieve their strategic and operational objectives. Knowledge management contributes to increasing the efficiency and effectiveness of operations on the one hand and to innovate and change the quality of competition on the other. The aim of knowledge-oriented management is to generate knowledge from information and convert this knowledge into a sustainable competitive advantage that can be measured as success in the business. In view of this, knowledge management is comprised of the following tasks and purposes:

- *Acquiring knowledge*: Ensuring that the information and knowledge necessary for business development and business processes is available.
- *Creating knowledge*: Ensuring that the knowledge is developed in the most suitable place inside or outside the company and that it leads to innovation.
- *Sharing and using knowledge*: Ensuring dissemination, learning and optimum use of knowledge.
- *Learning*: Ensuring that the organisation and each of its employees is able to learn and to reflect as well as apply what is learned.
- *Protecting knowledge*: Knowledge is an asset and its value needs to be protected by keeping it updated through contributions from people.

The challenge is to evolve the right approach for managing knowledge. It depends on the culture of the organisation and is a combination of «people systems» and «information systems». The approach of «*knowledge ecology*» emphasises that companies should achieve the right growth conditions for «*knowledge plants*» (see ▶ Chap. 5).

6. What are the hurdles in the creation and use of knowledge?

Hurdles in the creation and use of knowledge in many companies can be summarised using the following points:

- *Organisation structure* (e.g. line of business, establishments, and profit centre) *and values* practiced in the organisation create obstacles to knowledge flows. Knowledge is power and is therefore kept under wraps. The «*not invented here*» syndrome prevents transfer of knowledge.
- *Reward and appraisal systems* offer too little incentive to collaborate, learn and transfer knowledge.
- There are a lack of *efficient processes for creating and transferring knowledge*. Information systems are not user friendly.
- Knowledge is often confused with *information* and is therefore treated as a product such as «*frozen food*» (see ▶ Chap. 3).

7. How to promote knowledge sharing?

Managing a company from the knowledge point of view means aligning behaviour and cooperation directed towards shared goals and values of the organisation as a whole. This should be done in such a way that the short-term success of units and the long-term development of competence of the organisation as a whole can be ensured.

The following three conditions must be fulfilled in order to create and transfer knowledge effectively:

- *Enabling conditions*: Corporate values, guiding principles, mission, vision and the reward systems must interconnect with the success of the business units and the contribution to the development of the whole organisation.
- *Rules of the game*: A knowledge market should be established in the company with supply and demand. Those in need of a solution can seek knowledge and those who have insights can provide knowledge.
- *Processes/structures*: Efficient processes, structures and media should be developed for creating and transferring knowledge (see ▶ Chaps. 3 and 4).

8. How to create a «knowledge ecology» that promotes knowledge flows and learning across the organisation?

A knowledge-promoting environment – also known as a knowledge ecology – contains a value system that is characterised by terms like trust, cooperation and openness to continuous change.

Today, the goals and incentive systems in many of the companies are based on business units or profit centres. Individual performance is honoured more than teamwork. However, under knowledge management, companies begin to consider measurable contributions to the creation and transfer of knowledge in their appraisal systems. While rewarding knowledge workers, the success of the entire organisation is heavily weighted (e.g. using equity options) in order to encourage transfer of knowledge and teamwork across firms.

By introducing a «*Balanced Scorecard*», the traditional financial indicators can be complemented by competence-based criteria (based on customer, employees, processes, innovations, etc.). Companies are increasingly appointing «*knowledge managers*» at senior management level. However, these efforts will be successful only if senior management is committed to knowledge management (see ▶ Chaps. 4 and 9).

9. How can we organise processes and structures to support a knowledge market in an organisation?

Establishing a knowledge market facilitates knowledge supply and demand, brings knowledge sellers and knowledge buyers in contact, facilitates exchange of knowledge and determines the exchange conditions.

What does this actually mean? Firstly, it is necessary to achieve transparency in terms of «who knows what in the organisation». Once the knowledge supply is presented transparently, the sellers and the buyers should be brought into contact with each other. Formal and informal networks (e.g. communities of practice) are increasingly gaining importance for this purpose. Contact fairs, approaches via the internet, debates, exchange of experiences, mentoring, etc., are other options to bring knowledge sellers and knowledge buyers in contact with each other.

The common interest of the seller and the buyer is crucial for the success of the subsequent exchange of knowledge or the collective development of knowledge. Exchange and development of knowledge can take place through competence networks, cooperative projects, personnel rotation and exchange of manuals as well as process and customer information (see ▶ Chaps. 5 and 9).

10. How should a company introduce knowledge management?

Experience has shown that a combined change process from top to bottom (top down) and from bottom to top (bottom up) supported by appropriate information technology is promising. It is possible to adopt different ways of introducing knowledge management.

The following arrangements should be made:
- Knowledge, learning and innovation are integral parts of the overall organisational strategy. *The leaders of the organisation* should be fully committed to actively managing knowledge resources: «Knowledge creation and transfer is very important for ensuring prolonged competitiveness of our company. The performance of the management and the employees is measured based on this».

— *Management and reward systems* should be reformed so that learning and competence development oriented at the overall goals of the organisation are honoured. Collaboration is a defining principle across the organisation. Managers and leaders recognise and reinforce the link between knowledge, learning and performance.
— Relevant knowledge is made available and enriched in processes, work flow and projects. *Competence networks and «Communities of Practice»* transfer knowledge within and outside the company (e.g. to suppliers).
— The *information and communication systems* ensure that information is easy to access and retrieve. Selected information is sent to potential users in a systematic and coherent manner.

Firms should avoid to create a knowledge management structure that is parallel to the «real business», but rather make sure that KM is integrated into all business functions.

This *introduction strategy* of *k*nowledge management leads to short-term successes that pave the path for a long-term strategy of knowledge management. The «*Twelve-point programme*» at the end of this book will assist its implementation (see ► Chap. 9).

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About the Authors

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