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An integrative concept of the knowledge management cycle and organisational distinctive competences 知识管理周期和组织独特能力的综合概念

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# An integrative concept of the knowledge management cycle and organisational distinctive competences

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## **Abstract**

This article develops a complement to the integrative concept of the knowledge management cycle with a strategic competence subsystem, aimed at the sustainable growth of distinctive competences. The presented integrative concept of the knowledge management cycle and the organisation's distinctive competences allows to extend the conceptual framework of the approach aimed at combining the paradigms of the resource approach to strategic management and knowledge management. It is an attempt at a broader and more systemic interpretation of the approach that has emerged in recent years around the concept of knowledge-based dynamic capabilities (KBDC). As the organisation evolves, capabilities and competencies are constantly and dynamically recombined in updated configurations that allow for a flexible response to changing business conditions while maintaining a conscious focus on the organisation's significant long-term goals. At the same time, it is important to integrate knowledge as a kind of circulatory system that will circulate between the various competence bodies of the organisation, especially in relation to distinctive competences, although many of the principles are equally applicable to core competences. An organisation within the framework of such a paradigm in the context of the modern knowledge economy, can be defined as an intentionally directed knowledge system that strategically builds its pool of distinctive, key and unique competencies within the framework of an ascending and increasingly complex spiral reproduction of data, information and knowledge flows.

**Keywords:** knowledge economy, knowledge management, knowledge management cycle, distinctive competencies, core competencies, dynamic capabilities, information, knowledge-based dynamic capabilities, KBDC.

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# 知识管理周期和组织独特能力的综合概念

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# 简介

本文对知识管理周期的综合概念进行了扩展,增加了一个战略能力子系统,旨在持续增强与众不同的能力。所提出的组织知识和独特能力管理周期的综合概念, 有助于扩展该方法的概念框架,旨在将基于资源的战略管理方法和知识管理范例结合起来。它试图以基于知识的动态能力概念为中心,对过去几年中出现的方法 进行更广泛、更系统的解释。随着组织的发展,能力和胜任能力会不断动态重组,更新配置,以便灵活应对不断变化的业务条件,同时有意识地关注有意义的长 期目标。重要的是,要把知识作为一种循环系统,在组织的不同能力之间进行循环,特别是从独特能力的角度来看,尽管许多原则同样适用于核心能力。在现代 知识经济的背景下,这种范式下的组织可以被定义为一个密集导向的知识系统,它在数据、信息和知识流的螺旋式上升和日益复杂的再生产过程中,战略性地建 立起自己独特、关键和独一无二的能力库。

**关键词**:知识经济、知识管理、知识管理周期、独特能力、关键能力、动态能力、数据、基于知识的动态能力。

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## Introduction

Within the modern understanding of the characteristics of knowledge as distinct from information and data, it is widely recognised that knowledge is formed and expanded through the analysis and interpretation of information, and that the mere structuring and organisation of data is not sufficient to produce reliable - and more importantly, productive - meanings in the context of achieving business objectives and implementing business strategies. In order to form knowledge, it is necessary to achieve a more holistic and deeper understanding based on concepts and theories (not necessarily within the strict academic canon as we usually understand these words), as well as principles. As a result, knowledge (as opposed to information) allows one to rely on deductive principles when making complex decisions, according to the famous statement of R. Descartes: 'The knowledge of principles frees one from the need to know many facts.' In the context of the implementation of business tasks and strategies, this deductive principle is largely associated with the distinctive competencies of the organisation, which are initially developed in a largely inductive manner, as the implementation of projects and business functions involves a constant grinding of resources against each other and a dynamic ascent from resources to capabilities and then to competencies, including key, distinctive and even unique competencies. As competences are formed, they become increasingly consistent with Descartes' understanding of knowledge as a kind of integral metaability to deal holistically with the solution of relatively homogeneous problems and tasks based on the principles of deduction.

In recent years, the term 'knowledge-based dynamic capabilities' (KBDC) has been consolidated in research within the framework of a theoretical approach that aims to combine the paradigms of the resource-based approach to strategic management and knowledge management [Kaur, 2023]. The paper [HernándezLinares et al., 2024] showed that knowledge-based dynamic capabilities are related to firm performance and that this relationship is partially mediated by the entrepreneurial orientation of the firm. [Songkajorn et al., 2022] examined the positive relationship between organisational strategic intuition and knowledgebased dynamic capabilities in high performance organisations.

The above-mentioned research direction to deepen the understanding of knowledge-based dynamic capabilities seems to be very important and productive, also because the theory of dynamic capabilities, in conjunction and in mutual complementarity with knowledge management, has proven to be particularly useful in the study of digital business transformation and organisational change [Mele et al., 2024]. This article presents an attempt at a more integrated view at the intersection of knowledge management and organisational capabilities/ competencies. The aim is to complement the integrative concept of the knowledge management cycle with a strategic competence subsystem aimed at a sustainable increase in distinctive competences.

## 1. Integrative concept of the Dalkir Knowledge Management Cycle

A systematic review of various approaches to the knowledge management cycle [Wiig, 1993; Meyer, Zack, 1996; Bukowitz, Williams, 2000; McElroy, 2003] allowed K. Dalkir in 2005 to develop an integrated (a kind of consolidated) model with three main stages that are the most universal and sufficiently complete within the framework of systemic and cyclical knowledge management in an organisation: knowledge collection and/or creation, knowledge exchange and dissemination, knowledge acquisition and application [Dalkir, 2005; 2011]. The three main processes between these stages are evaluation, contextualisation and actualisation. Dalkir's integrative model is shown in Fig. 1.

CONTEXTUALISATION



Knowledge acquisition and application

Fig. 1. Integrative concept of the knowledge management cycle by Dalkir

Source: [Dalkir, 2005].

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As is well known, the integrative concept of the Dalkir Knowledge Management Cycle has received a great deal of recognition due to its successful systematisation of previous, more specific concepts that were more disparate and less universal in their applicability and explanatory power. Among the strengths of the model is its high degree of complementarity with key business concepts such as competitive advantage, innovation potential and business processes. For example, researchers note that knowledge creation in the context of business is primarily the development of new innovations that did not previously exist in the organisation; and contextualisation is fully successful when new knowledge content and innovative increments are organised and integrated into the business processes of companies with obvious benefits for the owners [Mohajan, 2016].

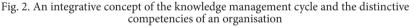
At the same time, however, it is possible to note that researchers have paid insufficient attention to integrating aspects of the knowledge management cycle with aspects of the strategic development of the organisation's capabilities and competencies in a broader context than knowledge capabilities, i.e. with a general model of competencies on the basis of which the organisation not only solves its current problems (especially business problems), but also implements its long-term vision and strategy. Although such research has emerged in recent years, this conceptual interface seems very promising and deserves more attention. Among recent studies, an attempt to integrate knowledge management processes, innovative capabilities and organisational activities is worth mentioning [Migdadi, 2022]. Another study examined

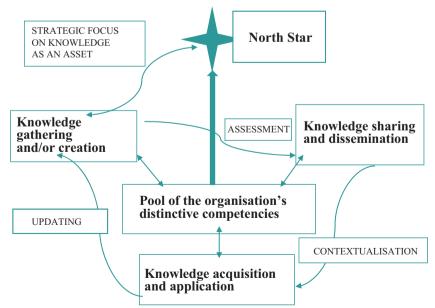
the mediating mechanism of knowledge management capability in the relationship between human resource management and firms' innovative capabilities [Lei et al., 2021].

# 2. An integrative approach to the knowledge management cycle, complemented by a strategic competence subsystem

In order to emphasise the spiral nature of the knowledge management cycle in modern organisations, the explanation of Dalkir's integrative knowledge management concept can be supplemented with a vertical arrow reflecting the growth of the organisation's competences and the corresponding complication of the decision-making context, which in turn, through feedback, leads to a more ambitious demand for knowledge updating in line with important organisational goals. This combination of the integrative concept of the knowledge management cycle with the conscious development by the organisation of its pool of distinctive, key and unique competencies seems very productive, since it answers both the 'how' and the 'why' questions. An organisation within such a paradigm in the context of the modern knowledge economy can be defined as an intentionally directed knowledge system that strategically builds its pool of distinctive, key and unique competencies within the framework of an ascending spiral reproduction of data, information and knowledge flows. The integrative concept of the Dalkir knowledge management cycle, complemented by a strategic competence subsystem, is shown in Fig. 2. It can also be called an integrative concept of the knowledge management cycle and the distinctive competences of the organisation. It should be separately emphasised that within the framework of the presented integrative scheme it is the distinctive competences that are emphasised, and not the key competences. This emphasises that, in the context of the proposed addition to the integrative concept of the knowledge management cycle, the strategic competence subsystem even increases distinctive capabilities, while key competences (by definition less specific and easier to copy) are also present here by default and are built into the same mechanism of mutual reinforcement with the organisation's knowledge subsystem.

The North Star, shown in Fig. 2, represents the sense of identity and the underlying (meaning-generating) organisational purpose. Knowledge is organised and largely self-organises around the organisational purpose.





*Source:* developed by the author (supplemented by a strategic competence subsystem) on the basis of the integrative concept of the Dalkir Knowledge Management Cycle [Dalkir, 2005].

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Knowledge-based organisations create deliberate, longterm and sustainable pathways for knowledge creation. They build a strategic architecture of processes that support the creation, acquisition, dissemination and renewal of knowledge.

Companies such as Google, Amazon and Microsoft organise their innovation activities in such a way that they constantly monopolise knowledge while outsourcing the development of individual innovative solutions to other companies and research institutes. Intellectual monopolies accelerate the accumulation of knowledge within their corporate innovation systems, which they then effectively transform into intangible assets [Rikap, Lundvall, 2020]. In this sense, distinctive competencies, especially in digital companies, are increasingly the result not only of data assetisation [Zhang et al., 2022], but in a broader interpretation - knowledge assetisation. The result is an intensification of the use of intangible assets in value chains and the creation of a kind of knowledgebased source of market power, which some researchers not without reason call intellectual monopoly capitalism [Durand, Milberg, 2019]. And this in turn leads to a wide range of socio-economic consequences - both positive and negative. The negative consequences also include a phenomenon such as digital rentiership [Birch, Cochrane, 2021], which is also largely the result of advanced knowledge.

## Conclusions

As W. Churchill put it: 'The empires of the future are empires of the mind'. The same can be said about the current and especially future business empires that will be able to fully build a knowledge-centric model of organisational development on productive principles, including awareness and self-awareness in building their knowledge and competence profile based on the systemic interaction of these two cycles. It is particularly important to synchronise growth and focus knowledge on the strategic and deliberate development of skills in the organisation. Each organisation has a unique organisational identity based on how it integrates its competencies, which in turn determines many of the routines of selflearning, building a knowledge management cycle and forming a composition of distinctive competencies. As an organisation evolves, capabilities and competencies are continuously and dynamically recombined into updated configurations that allow flexible responses to changing operating conditions while maintaining a conscious focus on the organisation's meaningful long-term goals. It is important to integrate knowledge as a kind of circulatory system that circulates between the different competences of the organisation. An organisation, within the integral concept presented in this article, can be defined as an intentionally directed knowledge system that strategically builds its pool of distinctive, key and unique competencies within the framework of an ascending spiral reproduction of data, information and knowledge flows.

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