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Approaches to Implementing a Knowledge Management System: The Case of United Engine Corporation JSC

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ABSTRACT

This study **aims** to identify the key factors behind the successful implementation of a Knowledge Management System (KMS) based on the experience of United Engine Corporation JSC (UEC JSC), and to develop practical recommendations for introducing KMS at Russian high-tech industrial enterprises. The **relevance** of this research lies in the growing importance of knowledge, experience, and information in today's market economy. The lack of a structured knowledge management system highlights the need for effective tools to foster a knowledge-sharing culture, as well as for mechanisms to locate, store, and distribute knowledge within an organization. The study employed a **methodology** based on the analysis of international and domestic academic literature, reviews of media materials, and an in-depth examination of UEC's internal practices. Key features of the corporation's knowledge management approach were identified, which, while grounded in widely accepted principles, are tailored to the specific operational context of the company. Particular emphasis was placed on the implementation of innovative knowledge management tools designed to enhance the efficiency of the company's information resources. The **findings** indicate that the success of KMS implementation at UEC results from the combined use of traditional approaches – adapted to the organization's specific needs – and modern technologies. The proposed solutions may serve as a foundation for other Russian enterprises seeking to design and implement their own KMS. The UEC case demonstrates that optimizing knowledge management processes can significantly improve an organization's competitiveness. Thus, a knowledge management system becomes not only a tool for increasing internal process efficiency but also a strategic asset in the modern economic environment. **Keywords:** knowledge management system; United Engine Corporation JSC; innovative knowledge management tools; organizational knowledge culture; practical implementation experience

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INTRODUCTION

In the context of digital economy, knowledge has become a strategic asset of companies. The concept of “knowledge” is one of the fundamental and still difficult to define from the perspectives of philosophy, epistemology, cognitive sciences, and other fields of study. Its interpretation requires solution of certain theoretical and methodological difficulties, such as polysemy, ontological complexity, and a dynamic nature, which in turn create multiple approaches to interpreting this term.

In some simplified way, knowledge can be interpreted as information that was selected, structured, and acquired in a specific manner in conformity with established norms, and thus obtaining a social significance recognised by specific social actors and society as a whole [1]. However, the following postulate is important for practical purposes: knowledge presupposes not only initial data but also convictions, moral values, ideas, inventions, judgements, professional competences, theories, rules, attitudes, opinions, concepts, and prior experience [2].

Knowledge management involves its systematic identification, creation, storage, dissemination, as well as dynamic replenishment, accumulation, and use of knowledge, focused on enhancing the efficiency of individuals and enterprises.

The contemporary point of view on knowledge management is essentially focused on its commercial relevance. The market value of knowledge grows in circumstances of global competition, where its effective use becomes a major driver for generating surplus value, reducing costs, enhancing productivity, and gaining market dominance.

The Strategy for Scientific and Technological Development of the Russian Federation until the year of 2035 stipulates that a high rate of mastering new knowledge and producing high-tech products based on one’s own technological platform becomes a key factor, which determines the competitive performance of national economies and the effective strategies of national security. In these circumstances, a considerable reduction of time from acquiring new knowledge, creating technologies and products, up

to their market launch becomes a significant factor for scientific and technological development.¹

The Concept of Technological Development for the period until the year of 2030 stipulates the process of capitalising on knowledge as a new institutional environment for the effective functioning of scientific and educational structures, small technological entities, and professional technology brokers.²

In recent years, Knowledge Management Systems (KMS) in Russia have become the venues of noticeably fast-growing public interest, especially within the high-tech sector of the economy. Companies operating in highly competitive markets and state corporations adopt KMS most actively. Such entities resort increasingly to create centralised databases, corporate portals to share expertise, mentoring and onboarding programmes for new employees. The principal objectives of this activity are to enable access to vital information and enhance operational efficiency by minimising the time of searching for necessary data and facilitating its prompt dissemination within the entity.

However, Russian enterprises encounter certain problems when implementing such systems, related, for instance, to the necessity to adapt them to foreign methodologies and to local conditions and comply with requirements of information protection in strategically specific industries.

The given article analyses the key factors for the successful implementation of a KMS based on the experience of Russia’s United Engine Corporation JSC (UEC JSC) and provides practical recommendations for its use in national high-tech industrial companies.

In the light of practical experience of “UEC” JSC, the authors have developed a model for KMS im-

¹ Strategy for Scientific and Technological Development of the Russian Federation. Approved by Decree of the President of the Russian Federation No. 145 of February 28, 2024. URL: <http://www.kremlin.ru/acts/bank/50358>

² Concept for Technological Development through 2030. Approved by Order of the Government of the Russian Federation No. 1315-r of May 20, 2023. URL: <https://www.garant.ru/products/ipo/prime/doc/406831204/>

plementation, determined stages and features of this process and identified distinctions from conventional approaches.

THEORETICAL ANALYSIS OF APPROACHES FOR IMPLEMENTING KNOWLEDGE MANAGEMENT SYSTEMS

The term “knowledge management”, defined in 1986 by K. Wiig, artificial intelligence specialist, at the conference of the UN International Labour Organisation [3], became popular in the mid-1990s during a surge of interest about knowledge management among both academic and industrial circles. Wiig defines this notion as the management of corporate knowledge to improve activities of corporate performance by means of enabling a company to operate intelligently and correctly [4]. Knowledge management means “understanding, focusing on, and managing the systematic, explicit, and deliberate generation, renewal, and application of knowledge”, since the ultimate objective leads to “maximising effectiveness of enterprises and the returns on ‘knowledge assets’ by means of continuously renewing them” [3].

Knowledge management is explicit and systematic related to the portion of knowledge, which is considered of vital nature, as well as the related processes of generation, collection, organisation, dissemination and implementation of knowledge. This necessitates transforming personal knowledge into corporate knowledge, which is intended for dissemination and introduction within the company [5].

G. von Krogh advances the definition of the given concept as “the process of identification, gathering, and implementation of the collective knowledge in an entity to help the latter obtain a competitive edge” [6].

Knowledge management can be viewed as a discipline that ensures an integrated approach to identifying, collecting, evaluating, retrieving and proliferating all of information assets of an enterprise, and it can be also considered as a field closely related to innovation management and organisational learning [7].

Therefore, successful management of knowledge requires that companies must clarify a set of roles and skills for performing the process of collecting, proliferating and using knowledge [8].

Based on the abovementioned concepts, we can come to conclusion, that there is no universal, widely accepted definition of the term “knowledge management”. The interpretation of this concept can be specific for each entity, depending on its objectives and methods to achieve them. Consequently, companies should develop their own perception of this activity based on their objectives, lifecycle stage, and specific operating terms [9].

In the given article, we suggest to interpret knowledge management as a systematic process, which involves the process of searching for, obtaining, preserving, using, and transferring knowledge, aimed at the continuous improvement of operation for existing or creating new individual or collective knowledge to enhance competitiveness of organisations.

Knowledge is an actual asset of any company. Therefore, like any other asset, it must be managed effectively. Knowledge management systems (KMS) are a set of measures, technologies, and tools designed for the identification, generation, storage, promulgation, and use of knowledge. The principal objectives of a KMS include increasing the consumer value generated by the business, developing and continuously improving the process of non-stop staff training, and optimising change management. The further development of an effective KMS should lead the organisation to the status of a self-learning (smart management) organisation [10].

The methodology of a KMS stems from the theory of systems. A system represents a combination of interacting elements, which contribute to achieving one or more determined goals.³ The components of organisational systems involve people, technologies, and information. Interacting with each other through feedback and management,

³ GOST R ISO/IEC 15288–2005. Information technology. Systems engineering. System life cycle processes. URL: <https://docs.cntd.ru/document/1200045267>

Table 1

D. Albers' Approach

Stage	Content	Explanation
1. Building a Knowledge Management Team	Building a cross-functional team including: Executive Sponsor (project examination for the management); Knowledge Ambassador (implementation support); Knowledge Manager (strategy development); Chief Knowledge Officer (support at all levels); Influence Supervisor (influence on the community of users).	Team members should have business, technical, and social skills, such as communication, leadership, negotiation capability, strategic planning, and competence of knowledge management methodologies and IT. The team may include department heads, architects, and other representatives of the company.
2. Developing the Strategy of Knowledge Management and Business Case	Conducting SWOT and gap analyses to find out: strategic gap (between what the company should do and what it does); a knowledge gap (between what the company should know and what it knows). Determining the knowledge, which is required to develop or obtain.	This stage enables to assess current state of knowledge management within the framework of strategic objectives of the company and identify key areas of improving it. The assessment helps determine the basis for development of knowledge management programme.
3. Conducting Knowledge Assessment and Audit	Distinguishing between notions "knowledge management assessment" and "knowledge audit": Knowledge management assessment reveals organisational factors (culture, leadership, processes, structure and technologies). Knowledge audit focuses on identifying, locating, and analyses of the use of intangible assets (expertise of employees, patents, reputation, etc.).	This stage aims to lay a foundation for an effective knowledge management programme. The assessment helps determine the entity's readiness for system implementation, meanwhile the audit identifies available resources and their use.
4. Conducting an Information Technology (IT) Assessment	Assessing IT assets, IT management processes, and IT investment efficiency. Identifying lacunas in current capabilities and determining the need for changes in IT infrastructure.	This stage ensures that the technological base meets the requirements of the implementation of a KMS. The assessment allows determining the changes in the IT domain necessary for the success of implementation of the project.
5. Developing a Project Plan and Metrics	Developing a plan to elaborate organisational changes in: policy and standards; retribution systems for knowledge sharing; learning through activity and observation; changes in business processes; mentoring and collaborative projects; creating communities based on practice; defining performance metrics (information access, information quality, knowledge flow, etc.).	The project plan includes measures for implementation of a KMS and mechanisms for evaluating its efficiency. Key metrics allow tracking the system's impact on the operation of the entity and adjusting its functioning.

Source: Compiled by authors.

they operate as tools for assessing the quality and timely availability of knowledge management tasks.

T. Davenport and L. Prusak advance the interpretation of the essence of a KMS, thus emphasising that such systems generate the knowledge which are necessary for managerial decision-making [8]. If a KMS is not available, the decision-

making process is complicated due to a lack of relevant information and limited use of individual experience and knowledge of employees. Introduction of a KMS contributes to eradicate these drawbacks primarily by means of the effective application of accumulated information and collective skills.

Table 2

IRIS Approach

Phase	Content	Explanation
1. Analysis and Identification of Target Knowledge.	Determining the knowledge that the KMS will transform into data for decision-making or task accomplishment. This includes identifying conceptual knowledge blocks, describing target knowledge, building an ontological classification.	The aim is to identify key knowledge needed for management. Conceptual blocks are the elements of the entity or its environment, which contain a specific type of knowledge. To describe knowledge, templates, questionnaires and reference models are used.
2. Target Knowledge mining	Defining mechanisms for mining target knowledge, including input variables (documents, knowledge of employees, data), knowledge sources (internal and external components), procedures and methods of calculating.	At this stage, methods are selected to obtain knowledge from available sources. Algorithms combine input variables to obtain target knowledge, which allows structuring the process of their collection.
3. Classification and presentation	Creating a model of the entity's knowledge map for two levels: CIM (Computation Independent Model) and PIM (Platform Independent Model).	The CIM model has conceptual blocks, target knowledge, their interactions, and procedures for obtaining them. The PIM model is the result of transforming the CIM. This ensures a unified representation of knowledge.
4. Processing and storage	Building an executable Platform Specific Model (PSM) to fix the knowledge map on a specific technological platform. Thus, a knowledge portal will provide tools for using the knowledge map.	This stage leads to the technical implementation of the system. PSM helps to obtain and use of knowledge regardless of spatiotemporal constraints. The knowledge portal is the interface for working with the system.
5. Use and Non-Stop Improvement	Building a knowledge portal and introducing mechanisms for its effective use: training users; system evaluation, cultural aspects supporting collaboration.	The aim of the phase is to support and develop the system. It is important to ensure self-sufficient service of the KMS, provide for performance metrics and take into consideration cultural specifics to involve all participants.

Source: Compiled by authors.

It is important to emphasise, that efficient systems allow for the integration of disparate sources of knowledge and make them accessible to all members of the organisation when it is required.

The article presents below two approaches to implementation of a KMS within the framework of theoretical analysis. The first approach was developed by J. Albers [11]. The concept involves a five-step procedure (*Table 1*).

This approach focuses on preparing the company for the implementation of a KMS and it emphasises the importance of assessing the current state, identifying lacunas, and developing a detailed strategy that considers the unique specifics of the entity.

The second approach was advanced by the IRIS Systems Integration and Re-Engineering Research Group (Grupo de Investigación en Integración y Re-Ingeniería de Sistemas, IRIS) in the University Jaume I [12]. It involves five phases (*Table 2*).

The IRIS methodology, based on the principles of systems engineering, envisages a clear division of the process into separate phases, each of them accompanied by specific tasks and methods. Unlike the approach by Albers, it offers a more structured approach to the implementation of a KMS.

Most Russian companies have no structured strategy for building a KMS: only individual projects are put into effect. HR and IT departments are often in charge of knowledge management;

meanwhile specialised services dealing with knowledge management operate extremely rarely. Many companies lack of a separate budget for knowledge management, so that the departments, which perform these functions, share the costs distributed between them [9].

Up to the present time, the technologies of KMS implementation are heterogeneous. Companies, which operate in highly competitive markets as well as state corporations, use such technologies most intensively. High-tech industries, telecommunications, oil and gas sector entities, finance, transport, etc. demonstrate a stronger demand for knowledge management too [9].

MATERIALS AND METHODS

To achieve the objective of the research, the authors conducted a review of international and Russian publications to analyse the concept of “knowledge management” and figure out the main methodological approaches to implementation of KMS in various entities. The methodology of the research was supported by evidence of a system-based approach.

The object of the study was the experience of implementation of KMS at UEC JSC, which makes part of the State Corporation “Rostec” as an integrated framework structure specialised in the development, production, and maintenance service of engines for civil aviation, space programmes, the naval and merchant fleets, and the fuel and energy complex as well.

UEC JSC was chosen for the research due to the following factors:

- the significant dependence of efficiency of the business process in the Corporation on the unique knowledge and competencies of its employees;
- the need for digital transformation of economic activities of the Corporation in the circumstances of import substitution of software;
- the necessity to preserve and transfer strategically important knowledge within the internal perimeter of the Corporation.

In the scope of the research, the following materials were obtained from different sources:

- scientific publications on knowledge management indexed in the databases of RSCI, ScienceDirect, and Google Scholar;
- analytical reports and materials on the activities of UEC JSC and the “KM Alliance” Association available for publication;
- conclusions obtained from the interviews with key employees of departments of the Corporation responsible for KMS implementation.

The authors made research in conformity to established ethical standards: survey participants provided informed consent for data privacy authorization and thus, the results turned out to be objective and accurate.

Research conditions of conducting the survey:

- limited representative sample of respondents;
- industry’s specific feature, which may reduce potential application of the results to enterprises in other economic sectors;
- time constraints, which prevent to assess the long-term effects of KMS implementation.

RESULTS

The history of implementation of KMS at UEC JSC started in the year of 2014 at the seminar aimed to formulate a project concept in order to integrate the given direction into the production processes of the Chief Designer’s Service of PJSC UEC-“Saturn”.⁴ Thus, the following issues were identified:

- the need for fast training of young specialists and their involvement in the solution of complicated design and technological tasks;
- specific features of development at the enterprise: tight schedules for launch of the product for the market, a diversity of customers, and limited resources.

PJSC UEC “Saturn” started building a system tailored to its corporative needs in the light of experi-

⁴ PJSC UEC “Saturn” is incorporated in “UEC” JSC.

ence of such companies as Snecma (France), the State Corporation Rosatom, and ZAO CROC Incorporated.

In the year of 2017, as a follow up of the successful implementation of the project at PJSC UEC “Saturn”, UEC JSC commenced expanding its best experience in knowledge management and KMS implementation in the activity of the Corporation. The relevance of implementing the KMS innovation was influenced by such problems as:

- lengthy and labour-intensive process of researching for required information;
- scaling information problems;
- unnecessary duplication of functions and regular errors;
- knowledge drain after the departure of some employees;
- high cost of adaptation of new employees;
- the need for an integrated communication system.

The objective of the project was to develop and implement a unified system for obtaining, collecting, storing, distributing, putting in operation, and providing new knowledge for all enterprises and services of UEC JSC. One of the priorities was to eliminate unnecessary duplication of R&D expenses and reduce the time required for sharing knowledge between projects.

Three aligned ways were determined for the implementation of the project:

- building a unified information environment for knowledge management;
- developing a method to identify, preserve, and improve knowledge;
- establishing a system to motivate personnel to work with knowledge.

Regarding key project milestones of the project, we have indicated the following:

- In the year of 2020, the Board of Directors of UEC JSC approved the knowledge management policy.
- In 2021, Knowledge Management Information System (KMIS) was put in industrial operation on the Jive software platform.

- In 2022, the organisational standard (STO) on knowledge management was published.

- In 2024, the project of import substitution of Jive software was completed.

Since 2024, KMIS has been operating on the VK People Hub platform.

The *Figure* below presents the chronological model of KMS implementation at UEC JSC with an outlook to the year of 2030.

Based on the analysis of the experience of UEC JSC, the approach to ensure implementation of KMS was formulated, namely:

- Formation of Knowledge Management Strategy: defining key knowledge required to implement the strategy.
- Knowledge Identification: selecting the knowledge needed for systematising and enhancing key business processes of the entity.
- Source Identification: revealing sources of knowledge required for specific business processes.
- Systematisation: Developing tools to support knowledge management processes, which inquires:
 - Building a knowledge base with Information Technology (IT).
 - Compiling and mapping inventories of knowledge.
 - Fostering a system of mentors.
 - Introducing a motivation system for effective transfer of knowledge.
 - Compiling experience records based on product project outcomes.
 - Compiling a portfolio of Knowledge Management projects.
 - Developing a procedure to evaluate effectiveness of KMS.
- Building culture of knowledge management, as a set of measures including:
 - Introductory training sessions and seminars.
 - Establishing professional communities for specific application areas of knowledge.
 - Support of the top management for the KMS.
 - Integrating the KMS into the professional activities of employees.

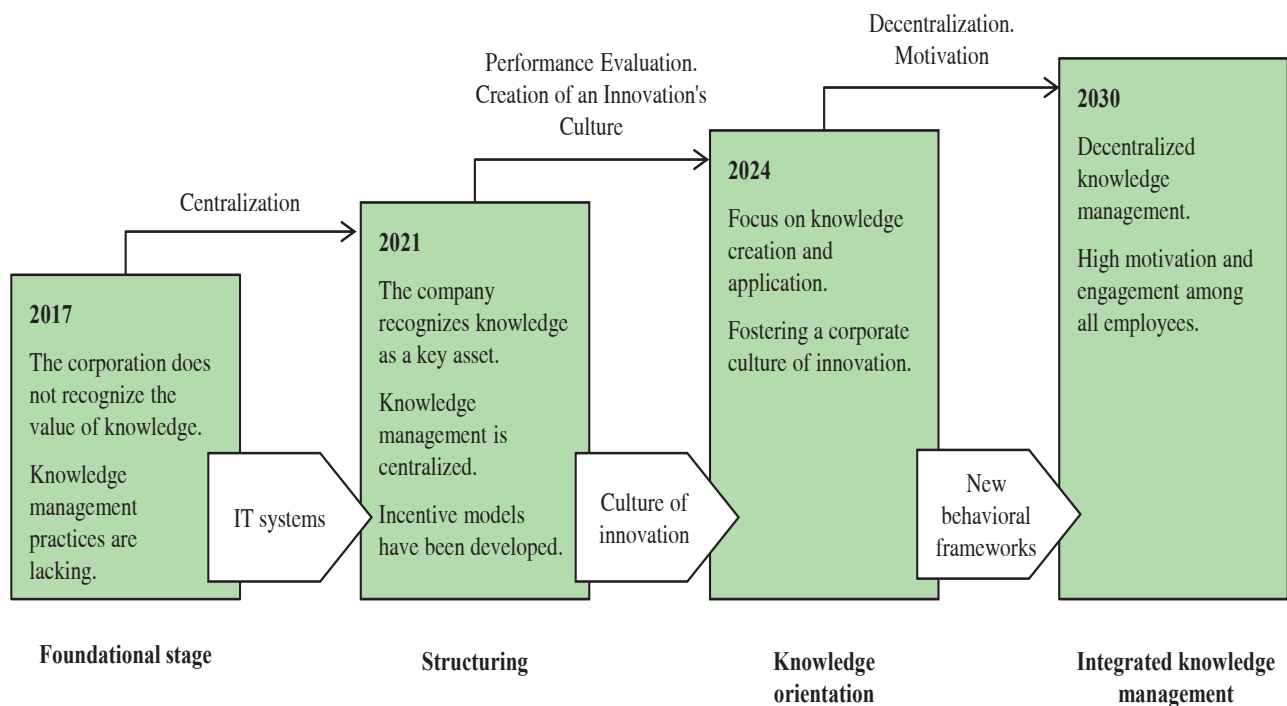


Fig. Model of KMS Implementation

Source: Compiled by authors.

- Evaluating the maturity level of the UEC KMS related to existing processes using such methods as:

- Personnel surveys (interviews).
- Monitoring surveillance of workflows, conditions in the work area.
- The study and analysis of documents.
- Modelling situations related to work environment.

The effective process of Knowledge Management is evaluated against such benchmarks as:

- Timely achievement of established indicators of maturity level for KMS.
- Fulfilment of the annual plan for raising the maturity level of KMS.
- Availability of a knowledge inventory for the process.

Measures, which contribute to the achievement of established indicators of KMS performance, are compiled on the basis of a final report. The latter contains a plan for raising the maturity level by the turn of the current year. Their fulfilment facilitates the dissemination of the best practices related to the KMIS.

The establishment of the qualification category “Knowledge Management Master” is distinctly noteworthy, as it definitely stimulates the development and enhancement of professional competencies of employees in this area and fosters a community of specialists with practical skills in applying the KMS and its tools.

The described above KMS implementation model encompasses elements of the approach advanced by J.A. Albers and the IRIS methodology.

Thus, the analysis of the experience accumulated by UEC JSC allows us to formulate a unique method based on the specific nature of the activities and expanded experience of the enterprise. At the same time, the emphasis is posed on the combination of theoretical preparation and practical implementation, which helps accounting for the specific features of the production process and requirements of the industry.

A key feature of the approach is an engaged support of top managers in fostering the culture of knowledge management, which ensures a necessary stimulus for the environment at all levels and contributes to its faster and more effective

implementation. Particular emphasis is given to human resources.

In the course of this research, the KMS of the UEC JSC was at the Knowledge Orientation level (represented by a focus on creating and using knowledge). Due to the knowledge management system, the latter knowledge is accumulated within the corporation at all managerial levels, enabling to increase both the speed of knowledge exchange and the effectiveness of its use by departments and project teams, as well as to ensure the accessibility to the knowledge and minimise turnover.

CONCLUSIONS

The given research has identified the key aspects of implementing the systems of knowledge management in enterprises. The analysis of global and Russian sources has revealed that a KMS is a comprehensive tool for enhancing efficiency of enterprises by means of optimising the processes of building, storing, disseminating knowledge, and putting knowledge into operation.

The implementation of KMS involves the use of various methodological approaches adapted to the specific features of particular enterprises and in conformity with the experience of UEC JSC a successful realisation of such approaches requires:

- a phased approach involving all organisational levels;
- building a knowledge-oriented corporate culture;
- introducing a system to encourage employees for sharing knowledge;
- building a technical base to operate with the knowledge;
- ensuring protection of confidential information.

Effective implementation of KMS depends on solution of a number of issues, namely:

- the need to rapidly train young specialists;
- time constraints and limited material resources;
- specific feature of the industry and particular production processes;
- ensuring the continuity of transferring knowledge.

The presented approach to the implementation of KMS suggests further adaptation in view of the particular realities of Russian legislation, requirements of information security, organisational specifics of companies, and technological constraints.

Among some promising directions for the development of KMS include: integration with digital technologies, modernisation of artificial intelligence mechanisms, building decentralised systems of knowledge management, and expanding interactive communication platforms.

The practical significance of the given research is the potential use of the suggested recommendations for developing programmes to implement and improve existing KMS in companies, enhancing enterprise efficiency, as well as preserving and developing competencies of the personnel. The results of the work supplement the information obtained by predecessors and specify existing approaches to knowledge management.

Thus, the implementation of a KMS constitutes a significant factor in increasing competitive potential of contemporary enterprises, although, it requires a comprehensive approach and consideration of multiple factors in order to reach optimal performance.

REFERENCES

1. Kemerov V.E., Kerimov T. Kh., eds. Modern philosophical dictionary. 4th ed. Moscow: Akademicheskii Proekt; 2020. 823 p. (In Russ.).
2. Giannetto K., Wheeler A. Knowledge management toolkit: A resource for creating policy and strategy, with practical guidance for managing knowledge at all levels within the organization. Aldershot: Gower

- Publishing Co., 2000. 113 p. (Russ. ed.: Giannetto K., Wheeler A. Upravlenie znaniyami. Rukovodstvo po razrabotke i vnedreniyu korporativnoi strategii upravleniya znaniyami. Moscow: Dobraya kniga; 2005. 192 p.).
3. Wiig K. M. Knowledge management: Where did it come from and where will it go? *Expert Systems with Applications*. 1997;13(1):1–14. DOI: 10.1016/S 0957–4174(97)00018–3
 4. Wiig K. M. Knowledge management: An emerging discipline rooted in a long history. In: Despres Ch., Chauvel D. Knowledge horizons: The present and the promise of knowledge management. Abingdon: Routledge; 2000:3–26. DOI: 10.1016/B 978–0–7506–7247–4.50004–5
 5. Skyrme D. J., Amido D. M. Creating the knowledge-based business: Key lessons from an international study of best practice. London: Business Intelligence Ltd.; 1997. 524 p.
 6. Krogh G. von. Care in knowledge creation. *California Management Review*. 1998;40(3):133–153. DOI: 10.2307/41165947
 7. McElroy M. W. The new knowledge management: Complexity, learning, and sustainable innovation. London: Routledge; 2020. 254 p.
 8. Davenport T. H., Prusak L. Working knowledge: How organizations manage what they know. Boston, MA: Harvard Business Review Press; 2000. 199 p.
 9. Zimova N. S. Implementation features of knowledge management systems in Russian companies. *Nauchnyi rezul'tat. Sotsiologiya i upravlenie = Research Result. Sociology and Management*. 2019;5(3):100–116. (In Russ.). DOI: 10.18413/2408–9338–2019–5–3–0–7
 10. Somonova N. S., Ivanov I. N. Corporate knowledge management system. *Vestnik universiteta (Gosudarstvennyi universitet upravleniya)*. 2013;(9):146–154. (In Russ.).
 11. Albers J. A. A practical approach to implementing knowledge management. *Journal of Knowledge Management Practice*. 2009;10(1). URL: <http://www.tlinc.com/articl174.htm>
 12. Chalmers R., Grangel R. Methodology for the implementation of knowledge management systems. *Journal of the American Society for Information Science and Technology*. 2008;59(5):742–755. DOI: 10.1002/asi.20785

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