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**TO THE QUESTION OF KNOWLEDGE
MANAGERS' EDUCATION**

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Abstract: The article is devoted to the identification of key features of training specialists in knowledge management and systematization of information sources available to them. The relevance of the subject is related to the growing need for managerial personnel, capable of organizing work with knowledge at the enterprise in order to achieve competitive advantages. The study examined the definitions associated with the management of knowledge in the foreign and domestic literature, analyzed the number of subjects taught in Russian specialized universities, revealed the predominance of non-formal education over education in universities. The phenomenon of teaching knowledge management within the framework of such related disciplines as information technology and personnel management has been studied. The article also systematizes the trends in which knowledge management projects are implemented. Based on the above specifics, it is suggested that the main driver of the development of non-formal education in this area is the entrepreneurial initiative of experts. The directions in which the contribution of Russian science to the development of knowledge management as a discipline is manifested to a special extent are noted. Such are the spheres of intellectual capital and information technologies.

The article will be of interest to researchers and practitioners whose professional interests lie in the field of knowledge management. In conclusion, ways of improving education systems in higher education institutions and non-formal education are proposed to increase the competence of all specialists who work in the field of knowledge management.

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Introduction

The subject of knowledge management (KM) is becoming more relevant every decade. In the knowledge-based view of the firm, knowledge is the most valuable resource for creating a sustainable competitive advantage [Grant, 1996]. Modern economic trends (digitalization of business, globalization and technological evolution, the growth of highly diversified products) change the structure of the market in such a way that the firm can not remain competitive by basing its strategy on traditional sources of the company's advantages such as a loyal customer base or reliable suppliers. These trends increase the importance of KM because only the possession of strategically important knowledge allows you to gain an advantage not only in quality, but also in time [Ragab, Arish, 2013].

Differences in the productivity of companies can be explained, including how they manage their knowledge resources. It is for this reason that the number of publications in international academic journals has been steadily growing in the field of KM in the last decade [Serenko, Bontis, 2013]. The main results of the research indicate the impact of KM on the company's performance, innovative activity, retention of valuable personnel within the company.

One of the key tasks of the current stage of development of the education system in Russia is the task of increasing the practical orientation of training specialists for the modern labor market. The growing demand of organizations for the availability of new skills in modern knowledge management professionals requires an appropriate proposal from the education sector. In general, this demand is not adequately satisfied. The main criticisms in the foreign literature and practice are aimed at the content of the taught content, which does not reflect the connection of knowledge management with cross disciplines, for example, personnel management, has no basis in reality and does not cultivate the future skills necessary for the future employees to create and disseminate knowledge, skills solving problems [Handzic et al., 2016].

The purpose of this study can be formulated as follows: it is necessary to clarify the features and trends of the existing system of training specialists in KM in Russia. In the future it will help to understand how the current educational opportunities influence the configuration of the knowledge management system of the company and, accordingly, how this generally affects the development of knowledge management in the Russian realities. This issue is very relevant, as Russian companies use the benefits of knowledge management, and a mature and developed knowledge management system increases the competitiveness and profitability of the company [Inkinen et al., 2015], however, such a system can not exist without qualified personnel. Thus, before the leader wishing to successfully implement / operate the knowledge management system, the task is to find and / or train such a specialist. This article will help answer the following question:

What are the key features of training specialists in knowledge management in Russia at the moment?

In order to answer this question, it is necessary, first, to set key definitions of knowledge management specialists, and secondly, to analyze the number of subjects taught in Russian universities and to offer author's recommendations. This article analyzes the role of formal and non-formal education in shaping the current skills of knowledge management specialists in Russian practice.

Formal education is a process in which knowledge is acquired in a certain institutional institution (school, institution, university), that is, a long-term program or a short-term course, at the end of which a graduate who successfully passed the final examinations / attestation has a set of statutory rights (for example , the right to engage in paid work for the profile of the passed training course, the right to occupy a higher position in the service hierarchy, the right to enter the educational institution).

The main feature of non-formal education is the lack of uniform, to some extent standardized requirements for learning outcomes. Thus, in non-formal education there may be all the other traits of training-expediency, enrollment procedure, lecture-seminar classes, success assessment system, certificate of completion, indicating the content of the course. However, the latter, as a rule, does not give the right to engage in labor activity on a professional basis or to enter educational institutions where documentary confirmation of the level of academic qualifications is required.

In foreign literature, the third branch is also singled out: the term "informal education", which is used primarily by theorists in the field of general education problems and is little known to a wide range of practitioners. However, the reality, which he reflects, is well known to all - this is teaching and learning in the process of everyday life. Informational education is the assimilation of social and cultural experience, occurring outside the framework of a pedagogically organized process and deprived of its basic attributes. In this article, we do not consider this type of education. Next, we will examine in more detail how the training of knowledge management specialists in formal and non-formal education is carried out:

- Formal
 - Undergraduate
 - Master
 - Postgraduate studies
 - MBA
- Non-formal
 - Courses
 - General
 - Industry
 - Conferences
 - Self-study
 - Online courses
 - Books and articles
 - Professional Communities
 - On-line
 - Off-line

The article is further structured as follows: the specificity of knowledge management is examined, the analysis of the discipline teaching in the largest universities of Russia is conducted, the analysis of non-formal education is analyzed and the main recommendations are formed in the conclusion.

Main body

Specificity of knowledge management as a field of activity

Knowledge management was formed as an independent discipline in the early 1990s. The main drivers of this process were three "C": computing, consultants and conferences. In addition to increasing availability of computers, distribution of best practices through consulting firms and promotion at conferences, there was also the fourth "C" - commerce. The first three drivers provided a strong commercial push to position knowledge management as a new organizational tool.

For the purposes of this study, it is necessary to systematize the existing definitions of employees who deal with KM in the company. In the foreign literature, this type of employee (knowledge managers) is called the "knowledge manager", and in Russian practice there are many possible definitions for employees in whose area of responsibility the KM area is located: "knowledge coordinator", "analyst", "knowledge manager", "specialist in knowledge

management ", " specialist in the management of intellectual assets ", etc. (see Table 1). In this article we will use the definition of "knowledge management specialist" as the most capacious and containing the main functions of this area of activity.

Table 1. Roles of staff related to knowledge management (compiled by the authors)

Post Title	Role in the knowledge management system	Functions
Knowledge worker	Control object	Applying existing and creating new knowledge
Knowledge coordinator	Content Management	Management of the intranet, web sites, databases and other storage systems
Knowledge manager/Knowledge management specialist	Managing people (knowledge workers) and processes	Organization of knowledge management processes; including: mastering the key knowledge of the company by new employees, acquiring competencies and qualifications necessary to work with knowledge, developing knowledgeable business processes of the company by developing and incorporating enterprise standards into the activity, collecting and analyzing lessons learned and best practices based on
Specialist in Management of Intellectual Assets	Managing the results of intellectual activity	Bringing the results of intellectual activity to the stage of commercialization. Reducing the company's losses from non-compliance with security rules regarding the management of intellectual assets of the company, compliance with commercial secrecy, clarification and control of the application of patent law.
Systems analyst/knowledge engineer	Extraction, structuring and codification of knowledge	Development of a single thesaurus to ensure effective communication between stakeholders. Collection, analysis and verification of requirements for changing knowledge of business processes, regulations and information systems. The use of analytical methods in dealing with heterogeneous problems in order to identify problems and business growth potentials
Chief knowledge officer	Development and implementation of a knowledgeable strategy	The organizational part of knowledge management, the development of basic ideas among employees, the training of personnel in the company's unified network information space, and the development of innovative methods for using corporate knowledge, protecting the knowledge of the company, increasing the usefulness of their use, creating and improving organizational knowledge

In foreign practice, knowledge management projects are headed by a vice president or director for strategic development, that is, a person holding a position in the top management of the company (see Fig. 1). In the practice of Russian companies, information management / data / knowledge is handled by IT or HR directors of companies (often these managers are the initiators of the launch of knowledge management programs). That is, the very concept of "knowledge manager" in the practice of Russian companies is rather blurry, but a single classification of definitions and the corresponding degree of responsibility will help companies to manage these assets competently.

The position of the "Chief Knowledge Officer" (CKO) implies the understanding of the knowledge management leader of the company's strategy and all related business processes. This person determines what information is valuable to the company, and which creates an additional burden on the information processing function. Thus, the knowledge management specialist needs basic training in the field of information technology - namely, the understanding of information processing, the ability to codify and graphically reproduce received / accumulated information. On the other hand, since knowledge is held by key employees, a specialist in such a profile should have basic ideas about working with the company's personnel, on developing key competencies, and on fair material / non-material incentives for employees of the organization. Also, the availability of communication and presentation skills will allow the knowledge management specialist to communicate effectively with the project manager / company. The competency profile of the chief knowledge officer contains requirements to the level of managerial skills, a deep understanding of the strategic priorities of the business, mastering the methods of researching the management system, methods of making managerial decisions.

A knowledge management specialist is often an employee with a master's degree, and not a bachelor or specialist. For the preparation of such specialists, it is necessary not only to have a high-quality education in a university with the presence of specialized disciplines, but also the availability of relevant practical experience or the receipt of a second stage of higher education.

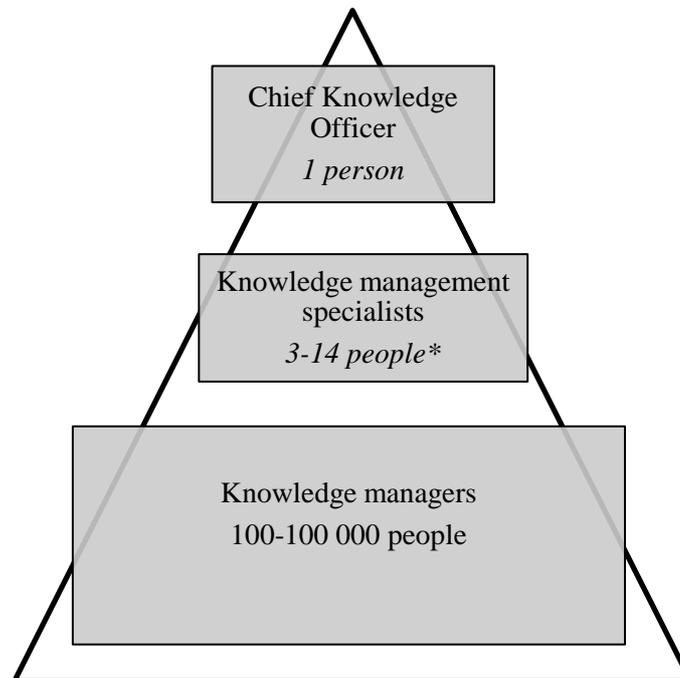


Fig. 1. The distribution of roles in the knowledge management system.

**The size of the KM team is based on the materials "2017 Knoco Global Survey of Knowledge Management": Size of the team depending on the size of the company with an average level of maturity of the US system.*

Specificity of knowledge management as a discipline lies in the fact that initiatives are difficult to implement, they slowly take root, and significant results take years. Combined with staff turnover and lack of access to a good theoretical base, this can cause a low level of satisfaction with the introduction of knowledge management practices or lead to the transfer of knowledge management initiatives to specialists who have very vague ideas about the subject. Another conclusion of the Western US study showed that two-thirds of senior management either did not know or were not interested in knowledge management, had only

basic awareness or were ambivalent about this phenomenon [Lambe, 2011]. In Russia, this trend is even more pronounced.

There is a conditional separation of knowledge management specialists [Handzic, 2007]: the ability to create, acquire and transfer knowledge and accordingly modify and adapt one's own behavior, by the ability to constantly increase the ability to create desired results, develop new patterns of thinking, establish free collective aspirations and learn together ; and, if possible, invent new knowledge as a way of behavior or being [Kelly, 2011]. It is also necessary to take into account the closeness of knowledge management to other fundamental constructs of the company's activities (see Table 2). Knowledge - a human or organizational asset that allows you to make decisions in the light of certain existing circumstances, but the exploitation of knowledge is impossible without the right tools, without qualified specialists and without the company's strategic course to increase its innovativeness. That is why, in the further analysis of the teaching of the discipline "knowledge management", we included in the search and disciplines from related fields (IT - information technology, KM - knowledge management, HRM – human resource management, I - innovation).

Table 2. The relationship between knowledge management and related research areas (compiled by the authors)

Research direction	Link with KM	Direction of link
Information technology	Information technology provides KM with various tools for flexible and reliable work, for example, collaboration tools, content management systems, information access technologies, filling and structuring of accumulated data and knowledge [Gavrilova et al., 2012]	IT → KM
Organizational learning	The main goal of organizational learning is the continuous development of new knowledge, while existing knowledge is updated, integrated and improved. Conversely, learning occurs when knowledge is created, disseminated and used [Moustaghfir, Schiuma, 2013]	OO ↔ KM
Human resource management	The HRM strategy and the company's overall strategy are part of the overall KM strategy and have some impact on the KM process [Edvardsson, 2008]. Knowledge-oriented practices of HRMs influence KM because they provide training opportunities for staff, thereby increasing their commitment to the organization and being willing to communicate with colleagues and share their knowledge.	HRM ↔ KM
Innovation	KM helps in the implementation of the function of knowledge sharing in the creation of innovation, which consists in the need to build a system of relationships with various actors in the innovation process to implement a full cycle, as a result of which the creative idea becomes a commercialized innovation. Creation of a new flow of knowledge that can form new needs and change the existing technological structure of the economy [Jimenez - Jimenez, Sanz-Valle, 2012]	KM → Innovation

Training in knowledge management in higher education institutions

Education received at the university, as well as non-formal education, including lifelong learning, has a great economic impact on all age groups. According to the teacher Cassandra B. Vite, lifelong students, including those with academic or professional experience, tend to find better paid professions, having financial, cultural and entrepreneurial impact on society [Whyte, 2002]. For the business, educated and highly skilled knowledge management specialists help to increase productivity. At the public level, education contributes to the

creation of social and institutional capital, which has a strong impact on the investment climate and company growth.

In order to assess the degree of training of Russian specialists in knowledge management, a secondary data study was conducted at the moment. To analyze the subjects taught, curriculums that were in the public domain were analyzed, all the proposed educational programs (full-time education) for 12 advanced institutions of higher education in Russia: Moscow State University. MV Lomonosov Moscow State Technical University. NE Bauman, St. Petersburg State University, Moscow Institute of Physics and Technology (National Research University, National Research University "Higher School of Economics", Moscow Power Engineering Institute (National Research University, National Research Nuclear University MEPI, National Research Tomsk Polytechnic University , St. Petersburg State Polytechnic University (National Research University t), National Research Novosibirsk State University, REU im. Plekhanov St. Petersburg National Research University of Information Technologies, Mechanics and Optics (ITMO).

Within the framework of this analysis of the curricula of the subjects taught in the higher educational institutions, those that can be related in one way or another with the subject of "knowledge management" were singled out. At the same time, emphasis was placed on identifying the following areas: direct knowledge management, personnel management, information technology and innovation.

Table 3. Teaching disciplines related to KM

Discipline groups	Number of teaching disciplines	Examples of teaching disciplines
Information technology	61	"Informatics", "Databases", "Analysis of large data", "Management of IT services and content", "Management of the value of information systems", "Programming and data processing"
Innovation	54	"Innovative management", "Organizational forms and technologies of innovative activity development", "Innovation projects management", "Technology Innovation", "Economics of investments and innovations", "Analysis of innovation projects efficiency"
Knowledge management	51	"Knowledge Management", "Knowledge engineering", "Information Resources and Knowledge Management", "Intellectual Property Management", "Economics of Software Engineering", "Evaluation of Intellectual Property and Intangible Assets"
Human resource management	22	"Organizational Behavior", "Human Resource Management", "Development of Interaction Skills", "Modern Management Technologies", "Organizational Competence Management", "Personnel Development Management"

As a result of the search for core subjects, as of 2018, higher education institutions teach disciplines that are more closely related to the field of information technology (see Table 3). Also there are disciplines that can be called related in their subject matter, for example:

- IT and KM (24 subjects, for example, "Structural designing of automated information processing and management systems", "Introduction to intelligent systems and technologies", "Methods and technologies for working with streaming and unstructured data"),
- IT and Innovation (for example, "IT technologies for the organization of international communication and corporate information management", "Information support for innovation", "Information systems in the management of innovation"),

- HRM and Innovation (for example, "Methods of motivation in innovation", "Development of creative and innovative potential", "Personnel management in an innovative firm"),
- IT and HRM (for example, "Group Dynamics and Communications in Professional Practice of Software Engineering", "Information Systems in Personnel Management"),
- KM and HRM (for example, "Managing Intellectual Capital for Business Value Creation").

The analysis of the division of the taught disciplines in bachelor's and master's programs showed that within the framework of bachelor's programs implementation the focus is on the use of IT technologies in the study of work with data / information / knowledge. There is a moderate number of specialized disciplines in knowledge management. On the master's programs, on the contrary, the focus is shifted towards innovation, and also profile subjects are added to the discipline "knowledge management". The number of subjects for personnel management is relatively low, both in bachelor's and master's programs.

At the moment, the educational sphere in Russia is undergoing a number of changes that relate to changes in educational programs in accordance with the realities of the modern economy: the development and implementation of new educational standards; introduction of new levels of education; forecasting, order formation and analysis of the result based on the implementation of the educational program; deep involvement in the formation of an order for the training of staff of interested parties; emphasis on meeting regional needs, supporting the development of regional educational systems. As the main recommendations for the development and strengthening of the interest in the use of knowledge management in companies, it is possible to suggest an increase in the number of subjects that would cover related disciplines (for example, knowledge management and personnel management).

Informal Knowledge Management Training

Formal education is relevant for students who do not have work experience. However, according to a multitude of studies in the field of andragogy, the traditional, formal approach to learning will not bring the desired results in the case of working with a more mature contingent with some experience and able to independently determine the goals of its development. Thus, the training of employees is primarily a system of assistance in training, and not education as such. The training of persons who have already received a higher profile education should be based on principles other than formal education. It requires a mandatory combination of three principles:

1. the practical importance of the knowledge transferred and the skills generated,
2. cognitive activity of trainees and
3. their direct participation in the implementation of the educational process [Knowles, 1990].

Understanding the fundamentals of andragogy allows you to choose the optimal training format and can explain the current predominance of informal learning over formal in the field of knowledge management.

As mentioned earlier, in terms of non-formal education, the following options exist:

- Trainings
- Online Courses
- Books
- Articles
- Private Courses
- Conferences and forums
- Professional communities

These options are discussed further in two sections: the possibilities for individual self-study, which include trainings, online courses, books and articles; opportunities for additional education, including face-to-face courses, conferences, seminars and forums, as well as gaining knowledge and recommendations on self-development in the core community of practice.

Self-study is a process in which the learner fully controls the learning path and process, chooses the form and terms of training, and determines what will be learned and how it will be learned. In view of the above mentioned features of adult education, self-education is possible only if the student expects to receive certain benefits from this process at the present time or in the future. In the event that the student assumes the return of investment, he is ready to invest his time and material resources in education. As possible benefits can be mentioned increase in wages, the acquisition of a new profession, the acquisition of a new status.

From this point of view, the development of paid courses and the development of content at the moment is a popular and promising direction for the development of knowledge management specialists. Online courses on US in the Russian-language Internet space are offered most often as part of training in the field of personnel management, or as an applied direction in information technology. A separate branch is the seminars devoted to the solution of specific management tasks or introduction of ultrasound practices, for example: e-learning, building a community of practice in the company, developing intracorporate Wikipedia, synchronizing the personnel development system and the knowledge management system, etc.

It should be noted that all these issues relate to knowledge management at the operational level and do not affect the tasks of developing a knowledgeable strategy, and its interface with the company's strategy. The last issue is devoted to significant studies in international literature, some of which have been translated into Russian. This situation concerns not only online courses, but also books.

A special area in non-formal education is trainings for the training of knowledge engineers and business analysts, carried out in various modifications - for students-programmers, student managers, specialists of various profiles and enterprise managers [Gavrilova et al., 2009].

Special demand among specialists in knowledge management is used by books, full of practical recommendations and descriptions of tools, practices, approaches. Here it is worth noting such publications as "Knowledge Management at 100%" by MIRBIS teacher Mariya Marinicheva, the book "Learn to Fly" by Chris Collison and Jeff Parsell, "The Fifth Discipline" by Peter Senge. In total at the moment there are about two dozen books, most of which is a translation of the world's bestsellers. The most frequently mentioned foreign authors are Nonaka and Takeuchi. This can be explained by the large Russian-language circulation of their book "Organization - Creator of Knowledge", which was distributed in the business environment, including free of charge. However, the applicability of Japanese concepts as a basis for knowledge management practices borrowed in the west raises doubts and requires a separate study.

The specificity of self-learning lies in the fact that it is based on the joint participation of other persons interested in the subject. Training must go beyond the personal construction of meaning. For example, the study of the practice of pedagogical education carried out within the framework of the self-study project can be checked for the degree to which it resonates with colleagues. In the case of studying such a new direction for the Russian environment as knowledge management, this specificity acquires special significance.

A significant role in this process is played by conferences and forums. These activities have their stated goal of free exchange of information, therefore it is obvious that they can be a valuable source of information related to the opportunities for experts to build new social connections, find like-minded people for new projects and adjust their course in applying

some knowledge management practices. One of the main reasons that specialists visit such events is to obtain information about the latest trends and developments in the professional sphere. Beginners can also benefit from participation in such activities, because at these events, experts share the information necessary to identify viable business practices and opportunities.

It should be noted that domestic event organizers actively engage foreign consulting companies and international experts, such as Ron Young, Nancy Dixon, Larry Prusak, Heinz Goddard, James Guthrie, etc., to cooperate. Most often on profile resources one can find references and materials of Ron Young's speeches .

According to the assessments of the listeners, presentations of implemented and working solutions are the most valuable in the speeches of domestic experts. The opportunity to receive recommendations on the choice of an approach, as well as to examine proven practices that take into account the specifics of the Russian business environment, is one of the key drivers of the organization of seminars and conferences, and the formation of professional knowledge management communities.

Professional communities of specialists on ultrasound are actively developing on the Internet. This is a consequence of the fact that the development of computer communications has led to changes in learning environments. The literature on professional development emphasizes the concepts of "learning communities" and "communities of practice" with asynchronous and synchronous communication, because technology allows students, regardless of differences in time and places, to participate more actively and effectively in interaction with colleagues. Specialists can interact with experts in their field, in the community there can also be a mentor, an instructor. Thanks to e-mail, chat rooms, message boards and videoconferences, participants can discuss problems, share their knowledge and experience and feedback. For adults studying in the workplace, this opportunity for communication can be important in terms of motivation, self-identification and socialization. According to the authors, at the moment professional communities have a significant influence on the development of the information field related to knowledge management. Communities of practice are formed around offline activities, which establish strong social ties. The initiators of these events can be:

1. Universities specializing in management, such as NRU Higher School of Economics, Graduate School of Management, St. Petersburg State University, Stockholm School of Economics and others. They organize seminars; invite practitioners who implement KM tools as speakers for master's and MBA programs; ensure close cooperation between business and science.
2. Profile associations for knowledge management, for example, KM Alliance in Moscow.
3. Multidisciplinary business associations such as MIBA and SPIBA.
4. Experts with experience in implementing a knowledge management system or its individual elements in Russian companies.
5. Teachers, whose fields of study are areas closely related to knowledge management.

Profile associations and experts on KM (both from the academic and business environment) communicate their ideas not only through communication in communities, but also through the organization of additional education courses, forums and conferences, as well as face-to-face courses. Full-time courses and seminars on knowledge management are provided by business schools on MBA programs, non-profit organizations and consulting companies. Some industrial companies also offer training in KM as a ready course for external listeners. An example of a systematic approach to the formation of knowledge managers is the modular program of Rosatom (ROSATOMA Academy), which is offered not only within the State Corporation, but also planned for delivery to business partners in Russia and abroad.

Recommendations

Based on all of the above, you can create practical recommendations for finding like-minded people and educational materials on the subject. A beginner who wants to master the specialty of a knowledge manager can suggest the following algorithm of actions:

1. Join one of the groups in social networks devoted to the exchange of experiences in the field of ultrasound. At the moment there is an active group on Facebook, the discussions in the Telegram messenger are gaining popularity;
2. Listen to several specialized distance courses;
3. Identify your initial focus in knowledge management, which is based on the basic education and experience already received. So, it will be easier for a psychologist to start with such trends as building a practice community, and for a programmer - with questions of building a knowledge base;
4. Visit a profile conference, forum, business breakfast or other thematic event. A recommendation on what kind of event to visit can be obtained from the Internet community chosen in the first step. At this stage, it is important to establish personal contact with correspondence specialists and create new connections;
5. After a newcomer becomes a member of a relatively small number of those who are interested in knowledge management, he seeks to get involved in practical activities, apply the received theoretical knowledge in practice.

To date, the fifth stage often precedes the first - first the employee begins to implement a function associated with ultrasound, and then, having felt the lack of knowledge, begins to read various forums and sites. Such a path can bring a positive result if the learning goals are formulated fairly competently. Navigator in a sea of contradictory and not always qualitative information can become so-called "communities of practitioners".

Conclusion

On the basis of the analysis, a number of conclusions can be reached. Formal education offered in Russia at the moment implies basic training for future knowledge management specialists. Interdisciplinary subjects (for example, communication of knowledge management with personnel management, etc.) are presented in single courses on basic educational programs. At the moment, opinion leaders in the sphere of ultrasound in Russia are people who, for objective reasons, could not receive a profile education in this field. Moreover, according to the "List of specialties and directions for the preparation of higher education", there is no such direction of training as "knowledge management".

At the same time, at the moment informal education plays a leading role in shaping the skills of a specialist in knowledge management. Among the opportunities for non-formal learning, the most effective, according to the authors, are the opportunities for obtaining additional education in close connection with the community of experts. These are: full-time courses in knowledge management, including MBA programs. The MBA courses are clearly applied and focused on the possibilities of using various KM tools.

In general, education in the field of KM is fragmentary, and is focused on solving highly specialized applied problems such as: the formation of a community of practice, building the knowledge base of the enterprise, developing a motivation system for knowledgeable employees. High focus on the practice of ultrasound at the expense of the theory affects the nature of scientific works in this field. A small number of Russian researchers are engaged in theoretical work and questions of the possibility of adapting Western experience to domestic realities. The contribution of Russian science to the development of knowledge management as a discipline is most clearly manifested in the sphere of intellectual capital and information technologies. In the field of strategic knowledge management, research is characterized by reviews and generalizations of Western literature.

The main driver of the development of non-formal education in the field of knowledge management is the entrepreneurial initiative of experts in knowledge management. Being interested in selling their knowledge and skills, they conduct educational work and act as initiators of carrying out profile activities. At the moment, knowledge management is not recognized as a separate discipline at the level of the education system, nor as a separate function in most companies. However, the initiative specialists interested in the subject can find many opportunities for self-development in this area. Higher education in this case is a prerequisite, which forms a certain specialization of the knowledge manager. A significant advantage in this is the degree. Almost a prerequisite for successful mastery of the profession at the moment is the knowledge of English at a high level (advanced level), which allows you to access the accumulated extensive theoretical base and international experience in knowledge management.

One of the proposed improvements in the education system for specialists in knowledge management can be the introduction of special mandatory courses or the organization of departments on the profile. Thus, employers will be able to hire ready-made specialists with system knowledge right after their release. Another solution could be intelligent systems of e-learning (intelligent e-learning systems) knowledge management. These systems offer materials suitable for the learner in view of his learning style, level of knowledge, interests and abilities, they are able to adapt the learning environment to the learner's preferences and offer tests corresponding to the student's current level of knowledge. They are flexible in time and are not tied to a specific place, which is actual due to the geographical features of Russia.

In general, in view of the fragmented and fragmented existing sources of information on knowledge management, it can be assumed that for a large company the most effective solution will be the creation of a team of specialists that will contain experts in both IT and personnel management, and in the field of process and project management, marketers or specialists in internal communications. Medium and small businesses can attract one or two managers specializing in those aspects of KM, which are the most relevant at the moment.

Limitations and further development of the study

Within the framework of this article, the opportunities for training specialists in knowledge management were presented. The study has certain limitations - first of all it is a list of the universities being considered - in this work the curricula of 12 major higher educational institutions of Russia were analyzed, but the list can be supplemented by other educational institutions that are not large, but may have in their training arsenal narrowly focused courses on the discipline in question. As part of the analysis, the information was found in open sources, however, on several official websites, information on curricula could be incomplete or outdated. Also, the study is limited to the region in question - mainly the training facilities in Moscow and St. Petersburg were included in the sample. This focus of the research reflects, in the opinion of the authors, the current situation in the field of knowledge management.

In the context of development of the proposed study, the following areas can be distinguished:

- Conducting large-scale surveys to identify existing knowledge management practices and determine the overall level of implementation of knowledge management systems in Russia;
- Conduct in-depth interviews with experts in the field of knowledge management in order to generalize their experience and make recommendations for various sectors of the economy;
- Detailed study of the leading companies implementing system knowledge management.

A lot of empirical research points to the positive impact of knowledge management on the effectiveness of the firm. The practice of knowledge management influences the work of the organization, which in turn affects the results of financial activities. Also, knowledge management and learning organization affect the firm's productivity and its cost. In this regard, it is necessary to explore the opportunities that exist for Russian companies to increase productivity through the introduction of knowledge management practices.

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