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## KNOWLEDGE MANAGEMENT: THE APPROACH TO IMPLEMENTATION

Knowledge management as an independent sphere of management should be one of the main tools designed to improve the competitiveness of the enterprise. The author is engaged in the creation and implementation of quality management systems and consulting activities. The article presents the author's own vision of the concept of knowledge management implementation.

Knowledge management is defined in the article as an instrument of intellectual capital management. The tasks of knowledge management are the achievement of the organization's goals due to the growth of intellectual capital and its effective use. Knowledge management provides the increase of the efficiency of the decisions made as well as creates the prerequisites for the appearance of innovations and the use of benchmarking in all spheres of activity. The author points out the necessity for training and motivation of employees in the implementation of knowledge management, and also emphasizes the need to comply with this condition in order to increase the efficiency of design, production, increase of purchases and effective marketing.

Keywords: motivation, knowledge management, knowledge management system, structure request, codification of information, recognition.

## МЕНЕДЖМЕНТ ЗНАНЬ: ПІДХІД ДО ВПРОВАДЖЕННЯ

Менеджмент знань як самостійна сфера управлінської діяльності повинна стати одним з головних інструментів, призначених для підвищення конкурентоспроможності підприємства. Автор займається створенням і впровадженням систем управління якістю та консалтинговою діяльністю. В статті представлене власне бачення концепції впровадження менеджменту знань. В статті менеджмент знань визначається як інструмент управління інтелектуальним капіталом. Задачами менеджменту знань є досягнення поставлених цілей організації за рахунок росту інтелектуального капіталу та його ефективному використанні. Менеджмент знань дозволяє підвищити ефективність прийняття рішень, а також створює передумови для появи інновацій, використання бенчмаркінгу в усіх сферах діяльності. Автор вказує на необхідність навчання та мотивації співробітників при впровадженні менеджменту знань, а також підкреслює необхідність дотримання цієї умови для підвищення ефективності проектування, виробництва, збільшення закупок та дієвого маркетингу.

**Ключові слова:** мотивація, менеджмент знань, система менеджменту знань, структура запиту, кодифікація інформації, визнання.

**Problem statement.** In the conditions of a post-industrial society it is strategically important to occupy a niche in the market of high technologies, to get rid of the creation of materials and ecologically risky products. Those countries that will not be able to do so will forever remain outsiders in the future world economy.

All this led to a clear understanding that the values of the organization are not only its assets, manufactured goods and property, but also its experience, qualification of employees and their loyalty, know-how, culture, that is, all that is included in the concept "intellectual capital".

At the current stage of development of the market and society, intellectual capital is the main value of an organization and a decisive factor in competitive struggle. The assessment, accumulation and development of intellectual capital and, most importantly, its management to achieve the goals of the organization became an urgent task for the world's leading companies.

Analysis of recent research and publications. Knowledge management began to flourish in the 90s of the last century. This was due to the change of priorities in business and society, as well as the ongoing scientific and technological revolution, which is based on the use of the latest information technologies in all areas of human activity.

This problem is of interest to many researchers and practitioners management, such as, for example, P.Drucker, T. Davenport, I.Nonaka, H.Takeuchi, C.Charchman, D.Harrington, M.Jennex, M.Alavi, D.Leydner, K. Hollseple, C. Johnny and others.

The purpose of the article. The purpose of the article is to substantiate the essence of the concept of "knowledge management system", the definition of the

stages of its implementation in the organization, as well as coverage of those elements of the system that are part of the area of responsibility HR-manager.

**Main material.** Knowledge management (KM) – management of intellectual capital. His tasks are to achieve of the goals of the organization due to the growth of intellectual capital and its effective use; to increase the efficiency of the decisions made; to create of prerequisites for the appearance of innovations; to use of benchmarking in all spheres of activity; to traine and motivate the employees; to increase the efficiency of design, manufacturing, procurement and marketing processes.

Knowledge Management System (KMS) is a collection of interacting and interdependent elements related to knowledge management (processes, databases, software, organizational structures, etc.), which ensures achievement of the set goals.

For immediate solving of today's management problems and profitability of the organization managers want to receive from KMS some concrete tasks. First of all, it is important for them that the benefits of the costs invested in the creation and development of KMS have been quantified and predicted, that is, they require the creation of quantitative characteristics of the efficiency of KMS.

Secondly, they want a tool to reduce risks while making decisions. I would like to ask some system questions and get competent answers. From chart 1 it is clear that the system can give the user solutions, information or a hint, but not all of them are knowledge.

The following distinctions can be accepted in terms of information, data and knowledge [1]:

• Data – raw facts.

- Information an organized set of data.
- Knowledge interpretable (meaningful information), with a clear goal information.

Knowledge is the meaning delivered by the mind. Without meaning, knowledge is information or data. What is information and what is knowledge depends on the user.

Of course, the ideal variant for practicing managers is the acquisition of knowledge, giving an unequivocal answer to the question of how to solve a problem, and not a set of data and information, which it itself must process and transform into knowledge. Unfortunately, such an ideal is unattainable, since the system can only give probabilistic clues.

In fact, the KM is more strategic. Its development and implementation determines the future of the organization, the creation of its unique culture and the use of new ways to conquer the market and compete.

KMS involves not only the collection and purposeful use of information for the benefit of the enterprise, but also providing its employees with ample opportunities in self-improvement, gaining recognition and self-realization, which, according to Maslow, is the pinnacle of motivation.

The KMS consists of 5th levels. The 1<sup>st</sup> level of KMS generates solutions, tips, information for thought, that is, knowledge of the staff who ultimately return to the system, complementing and enriching it. Considering the structure of the KM, we will touch only on issues related to the structuring of information, data and knowledge, deferring issues of system administration. The entire set of data, information and knowledge can be broken down into external, internal and corporate information (Table 1).

Table 1

The types of information using by managers

Type of information		
External information	Internal information	Corporate information
information from the Internet printed publications, library information; reports on visiting exhibitions, conferences and seminars; external standards, legal and regulatory acts relating to the activities of the organization and the practice of their reports on negotiations with customers; results of external audits; application; interview with the employees hired; benchmarking results; patent information; supplier ratings; customer ratings; marketing information; customer documentation, etc.	the results of experiments conducted during the development and launch of products into production, statistics and analysis of identified inconsistencies, the results of internal audits, reports of the marketing department, supplier ratings, procedures and methods, circulars, directives, etc.	reports and correspondence with the parent organizations; corporate guidelines and guidelines; information on corporate programs, strategies, results of corporate activities; experience of organizations recommended for distribution; information about customers and partners; information about publications; information about discussions and seminars, etc.

Therefore, external information and data may, for example, be any information that gets into the enterprise. Internal information and data can be any information obtained as a result of the internal activity of the enterprise and of value for subsequent use. If an organization belongs to a corporation, then there is usually general corporate information used inside the corporation and closed to third-party organizations. Typically, such information is distributed through the closed corporate Internet system and may include, for example corporate guidelines and guidelines.

The second level is the structuring of information, data and knowledge on the key processes of the organization.

In this case, a business process is a process directly related to the manufacture of a product or the provision of a service, usually consisting of a series of consecutive sub processes, where the output from one of them is the entrance to the next. For example:

Marketing -> Design -> Preparation of production -> Production -> Sales

Improving processes can be, for example, enterprise self-assessment, benchmarking, analysis of the effectiveness of the quality system, development planning, etc.

The third level includes all internal information, data and knowledge can be divided into documented, that is, obtained from official documents, and hidden (tacit), which is located in the head of an employee of the organization or in his personal archives.

The fourth level is documented information, that is, technological documentation, controlling documentation, rules (for example, design, workflow, procedures, instructions), experimental data, reclamations and data on failures.

Fifth level are special rules for individual stages of the casting process with recommended typical or experimentally verified characteristics may be included in the "Rules" block for foundry production.

Process of Knowledge Management implementation consists of two phases: theoretical and practical. Each phase includes several stages (Figure 1).

When embarking on the introduction of the KMS, it is necessary to clearly define why this is being done and what result should be achieved.

You cannot implement the KM just because it is just good. The creation of the KMS should flow from the overall objectives of the organization and be related to the objectives of the second level in various areas of activity. It should increase the ability of the organization to generate and develop original and useful ideas and solutions [2]. In order for the KMS to provide the user with knowledge, it must correctly formulate the request. The structure of the request must be codified and decoded, and the process of its formulation must be clearly described.

Based on the structure of the request, catalogs are created for each part: goals, spheres of application and selection from the data array.

Users must be able to correctly compose the request, and the persons entering the information must codify it correctly.

Software tools should provide fast search and recodification, as well as archiving, distribution and necessary confidentiality.

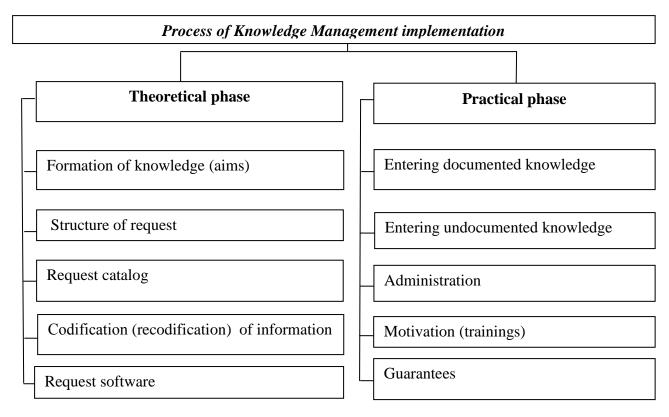


Figure 1. Process of Knowledge Management implementation

Documented knowledge refers to knowledge acquired from external and internal information that is in a document flow and is identified and registered

according to the rules adopted in the organization. They can be easily generated from electronic sources or entered by scanning from printed texts.

The main difficulty is the development and application of the rules of codification and decodification, the implementation of which requires special training and experience in the scope of the entered document.

At the first stage of the implementation of the KM, an audit of the existing archives and the selection of information for inclusion in the KM system is required.

Subsequent knowledge collection can be determined by special procedures. For example, you can provide mandatory standard notes about the need to enter data into the KM system on all types of documents. In this case, the performer of the document, the person approving it, or its recipient, are automatically involved in the process of collecting information and are authorized to make a decision on data entry.

Undocumented knowledge is usually of the greatest value to the KM, and at the same time it is the least accessible for collective use and inclusion in the KMS.

Undocumented knowledge constitutes the insurance fund of an employee of the organization, which he carefully guards and will never give to collective use. There are, however, gifted individuals who are ready to continuously share their experience and knowledge, based on the conviction that the growth of their knowledge and experience is ahead of the borrowing and use of its colleagues.

Such people, as a rule, have their students and followers, and they are the leaders in the development of the KM. These people can and want to work in teams, and they should be identified and included in the work on the construction and implementation of the KM.

Rules for entering undocumented knowledge can be motivated and coercive. To the motivated rules we will return. Forced rules are defined as actions established by the procedures or administrative documentation for documenting the data received and entering it into the relevant knowledge bases. These include, for example:

- mandatory reporting (conferences, exhibitions, contacts with the customer);
- determination of responsibility for the replenishment of the knowledge base and its monitoring;
- mandatory registration correspondence of original calculation methods and programs used in the design and manufacture;
  - registration of with the customer.

The KMS and knowledge creation and distribution processes cannot work effectively without adequate administrative support.

At the stage of development and implementation, such support is provided by the team, who has taken on the ambitious task of creating the KM, and the top management, who approve these works and allocate the necessary resources. In the future, the official should be allocated - the owner of the process of creating and using knowledge, responsible for the development and use of the KM. For its effective activity it is necessary:

- formal appointment;
- empowerment of functional rights and duties towards all employees;
- definition of monitoring rules;
- development of performance evaluation criteria;
- development of methods that determine what is included in the intellectual capital and know-how.

The creation of the KMS is associated with changes in culture in the organization and is impossible without creating special mechanisms that allow you to motivate the work to create the Ministry of Health and its effective use.

KM assumes the desire to share the acquired knowledge, achieving a synergistic effect, and, therefore, requires a higher level of motivation than just a monetary reward.

Here should be applied such methods of motivation that promote recognition and self-expression. And the first in their row should be such a powerful motivational tool as staff development.

KM can provide employees with ample opportunities for self-study and further promotion. It is possible to offer special internal courses of study using qualification grades and passing on-line exams. The widest access to knowledge should be ensured and, most importantly, resources should be allocated for receiving education during working hours.

Gaining knowledge is costly. Employees need to be aware that these costs are planned, and their use within a given framework is encouraged, otherwise no one will supply and use information to the KM.

The use of personal knowledge in the KM should be guaranteed to be rewarded and, if necessary, to be patented or acquired from an employee by special agreement.

All of these possibilities should be set out in a contract of employment or in a special procedure guaranteeing remuneration. Otherwise, the motivational power of the reward loses its meaning.

A stronger motivational factor is, of course, recognition. Therefore, the KM should include elements that allow employees to express themselves, exchange views and listen to criticism. People, as a rule, do not give their personal knowledge to a common "piggy bank" if they do not know what it will bring to them.

It can be facilitated by the opening of discussion clubs and the promotion of speeches. Active participation in the KM should provide support in external

publications and official recognition marks. A good motivational factor is the ability to connect to the Internet and Intranet. The implementation of the KMS is usually in the area of activity of the personnel manager, who faces new challenges.

The KMS should be an important link in the management of the organization, and its effectiveness in terms of resources and benefits should be continuously evaluated and provided to senior management. The development of such assessments, their monitoring and analysis should be carried out by an administrator who is responsible for the development, implementation, maintenance and continuous improvement of the KM. Depending on the effect, it should have a bonus that can be used to motivate employees.

Conclusions and perspectives of further developments. The KM is a new vector in the management of organizations, aimed at the accumulation and effective use of intellectual capital, should be one of the main tools to improve the competitiveness of organizations.

The KM is based on the key activities of the organization in marketing; production; engineering; benchmarking; information technology; quality management; personnel management.

The main obstacle in the implementation of the KM will most often be a low culture of Russian organizations and an insufficiently high level of use of information technologies.

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