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KNOWLEDGE MANAGEMENT AS A WAY OF ADAPTING TO AN UNCERTAIN FUTURE

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At present, we are living in an unprecedented historical period of capital reformatting. The era when capital meant only land, equipment, labour, and money has already become history. Today, classical forms of capital are giving way to the new form of "intangible assets". In the period from 1996 to 2021 the value of intangible assets in the world has increased more than 10 times from \$6 trillion in 1996 to \$74 trillion in 2021 [1].

If in 1996 intangible assets accounted for 20.1% of world GDP, then in 2021 them accounted already 77.9%. Thus, all this gives grounds to assert that humanity already has the structure of the new economy of the 21st century, where the main form of capital is intangible assets (knowledge, brands, patents, licenses, technologies). The main sectors of intangible assets are the Internet, software, technology and pharmaceuticals. If we look at the top 10 companies in the world - Microsoft, Apple, Saudi Aramco, NVIDIA, Amazon, Alphabet, Meta, Berkshire Hathaway, Eli Lilly, TSMC, it turns out that "most of these companies didn't exist at all before 2000" [2].

That is why the discipline "Knowledge Management" is one of the most popular concepts of modern science and is associated with such concepts as "knowledge-based economy", "learning organization". The development of this concept began in the 1980s of the last century. The rapid development of innovative technologies poses fundamentally new challenges to scientists, for the solution of which it is necessary to comprehend convergent and divergent approaches that bring together and interpenetrate science, technology and human life [3]. It should be noted that the term "Knowledge Economy" is not yet sustainable. In professional sources, we can find other names: "innovative economy", "knowledge society", "information society", "gig economy", "experience economy", etc.

Knowledge management is a general name for techniques aimed at obtaining new and updating existing knowledge and helping participants in the process to take the necessary actions in a timely manner, obtaining the right knowledge at the right time. According to Pareto's rule, such methods use 80% of humanitarian technologies, and only 20% of technological IT solutions.

Despite the growing interest in creating new knowledge, there are still unresolved problems in knowledge management:

1. Often, the definition of "knowledge" is on an intuitive level.

2. In almost every management process, it is written that it is necessary to preserve the acquired knowledge, but specific tools are not specified.

3. There are no tools for interaction between knowledge management in an organization and knowledge management of an individual.

4. Often "knowledge" - the main term in the structuring of the subject area of the enterprise, is replaced by the concept of information.

That is why in 2013 the DIKW (Data, Information, Knowledge and Wisdom) Model of Information Hierarchy was added to the project management standard guide PMBoK [4] (Figure 1).



Figure 1 – Knowledge Hierarchy Model [4].

The model defines that the encoded facts about an object are data. Information is a description of the relationships between data elements. Knowledge is some instruction on how to use an object in a particular context. Wisdom is explanations and advice for making decisions regardless of the context, that is, wisdom is useful to use in any context.

Another name for modern economics - behavioural economics - is located at the intersection of psychology and economics, which allows us to identify the psychological basis of human decision-making. The 2017 Nobel Laureate in Economics, Richard Thaler, in his research, linked economics and psychology by studying human behaviour in decision-making. In classical economics, a rational decision should be independent of emotions, personal feelings, or experience, and is usually associated with profit maximization (rational behaviour). If a person behaves differently than predicted by classical economic theory, this is considered "irrational behaviour". Rational process and the analysis must be logical and mechanical. If these minimum requirements are not met, that is, if a person is even slightly influenced by personal emotions, feelings, or moral standards, then such decisions are considered "irrational". But as modern research on human action shows, no human being ever satisfies these criteria, so it can be assumed that man very often acts "irrationally".

Information technology has led us to global changes in modern lives – the flow of information is increasing every day, professions are disappearing, people are being replaced by robots with artificial intelligence, and we simply cannot keep up with the changes. We need to realize that digital transformation is a collaborative innovation process in which individuals, small and large companies must learn to collaborate and create strategic partnerships to solve global problems.

Now the technological novelty ChatGPT is tearing up the information space. ChatGPT very quickly attracted attention precisely because of its ability to conduct a dialogue in such a very "human" way that it is very difficult to understand that the conversation is being conducted by a bot, and not a live person. The bot generates clear answers on any topic, it can be used both for obtaining information and for a casual conversation. Thanks to this, ChatGPT quickly gained insane popularity. It got 1 million users in five first days, while Facebook gained 1 million users in 10 months, and Netflix in just 3.5 years.

Since ChatGPT has broken the record for the speed of coverage and selflearning, humanity is faced with the question: will humanity suffer the plot of many science fiction films, when artificial intelligence can take over the world and destroy humanity? A few months before the release of ChatGPT, experts from the Oxford's University and Deepmind said that "artificial intelligence could destroy a humanity" [5]. The co-author of the article, Mike Cohen, explains this point of view as follows. Humans cannot compete with AI in the speed of logical calculations. According to the researchers, in order not to jeopardize the survival of humanity on Earth, it is necessary to develop artificial intelligence technologies very slowly until we learn to fully control them. After all, the pursuit of profits and popularity can lead humanity to a fatal end.

In the coming years, ChatGPT will become a convenient tool for entrepreneurs to quickly improve the quality of customer service: the chatbot will process a large number of requests, communicate with customers online, collect personalized information, and generate recommendations based on customer preferences. We are already impressed by the variety of possible applications of AI.

However, for now, ChatGPT is just a compiler. And the compiler is not artificial intelligence, it's just an algorithm for quickly iterating through data according to certain rules. In abstract concepts, he is quite slow, but he tries to compose some texts, which, obviously, can hardly be called "knowledge". All it does is quickly process the 73 billion pages that have been loaded into it, and then the algorithm adds texts which looks like reasoning. To compete with a person, AI lacks an understanding of ethics, emotions and creativity (soft skills). He can't come up with something that isn't in his templates. So, in order for a person not to lose in a competition with AI (as a man cannot compete with AI in the speed of calculations and working according to an algorithm), a person needs to develop their strengths – these are soft competencies and the ability to work creatively. And this, unfortunately, is what our technical education lacks. It is impossible to do this without reviewing existing educational standards and programs.

Global changes in the dynamic external environment require students not only technical skills, but an increasing amount of "soft skills". Therefore, in the process of training future technical specialists, it is necessary to develop the ability to solve complex interdisciplinary tasks and apply teamwork skills for complex problems.

Conclusions. In this day and age, when there is a global reshaping of capital, knowledge management should be a way to adapt to an uncertain future. There are still unresolved problems in knowledge management, when "knowledge" in the structuring of the subject area of the enterprise's activity is replaced by the concept of information.

To prepare students for life in the new world, it is necessary to change the philosophy of learning – from memorizing information to searching for creative approaches and other meanings in data. We should look at each person as a future inventor. However, it is impossible to do this without reviewing educational standards, programs and methods of teaching.

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