

THE ASPECT OF KNOWLEDGE MANAGEMENT

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Abstract: *Knowledge management categorically differs from the management of an economic activity. Knowledge management is an unprecedented activity in time and space. However different the knowledge is, they need to be embedded in a system, need to be upgraded, expanded. For anyone knowledge is a social "support"; for companies, firms knowledge of staff is the rating, their ability to overcome difficult situations.*

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Knowledge is the resource without length, width, height, weight, odor e.t.c. but they are and will still be the most demanded by human society and will therefore cost more and more expensive.

During his life, man was preparing for life developing his muscles, preparing for manual labor. At present physical work increasingly became "history", man is already preparing for intellectual work. In other words, contemporary man prefers to develop his "intellectual muscles". This development takes place in four stages:

- (1) - initiating knowledge;
- (2) - the accumulation of knowledge;
- (3) - knowing the knowledge;
- (4) - generating knowledge.

Contemporaneity still has a specific. In former times Galois, at an age of 18 years, was the author of a new theory in mathematics. History knows many Newtonians, Pascalians, Einsteinians e.t.c. At present, theories, new basic knowledge are the products of collective intellectual efforts, which are equipped with the necessary infrastructure for research, experiments, simulations, with means of communication, exchange of opinions, ideas. Additionally, ideas generators are usually motivated financially, socially. These (generators) can develop a creative intellectual force if they are a "critical" number. The proverb: A flower does not make a spring. A second aspect, intellectual products, ideas, and knowledge necessarily generated must be required. Knowledge helps to develop, for example, technologies and vice versa - these (technologies) can contribute to the further development of knowledge. The existence of only primitive technologies leaves no room for new ideas, effective technologies for two reasons: (1) - lack of qualified staff; (2) - lack of finance for organizing serial production of the respective equipment. In this way (perhaps) it is explained that the most and the greatest successes in the field of innovation are the highly developed industrial countries (the 7 countries). Countries that solve their financial problems from exports of natural resources, oil, natural gas, as a rule, do not place the "emphasis" on science, as a consequence, technologies are at best imported or old and morally obsolete. The availability of oil resources, natural gas, unreasonably high prices to them, have transformed countries exporting oil, natural gas, except the USA, Norway, Australia, to countries importing goods imported from outside. Reducing, or more precisely, collapsing oil prices will "respect" parasitic countries. It is known that about 70% of oil resources are consumed by cars with internal combustion engines based on gasoline, gas, diesel. Replacing internal combustion engines with electric motors will help reduce demand for oil resources considerably and thus reduce prices. Exporters of oil resources will be in difficult situations. Science can not be developed overnight, there are

needed 2-3 generations of scientific collaborators to create an "incubator" of ideas, technologies, and generator of ideas.

However, the problem is also complicated by the lack of the necessary scientific infrastructure in these countries for the most diverse experiences, analyzes, tests etc. Another issue will be created by highly developed industrialized countries, where the motivation of the work of knowledge generators is clearly superior to that of "oil" countries, and therefore scientific figures will be "lured" into technologically and scientifically developed countries. The question of "Knowledge Management" is: but who is the manager? Our answer: manager is the market, the demand for knowledge of the producers of goods and services. This (demand) appears not always, as a rule, with delay. That is why the first knowledge manager must be the state.

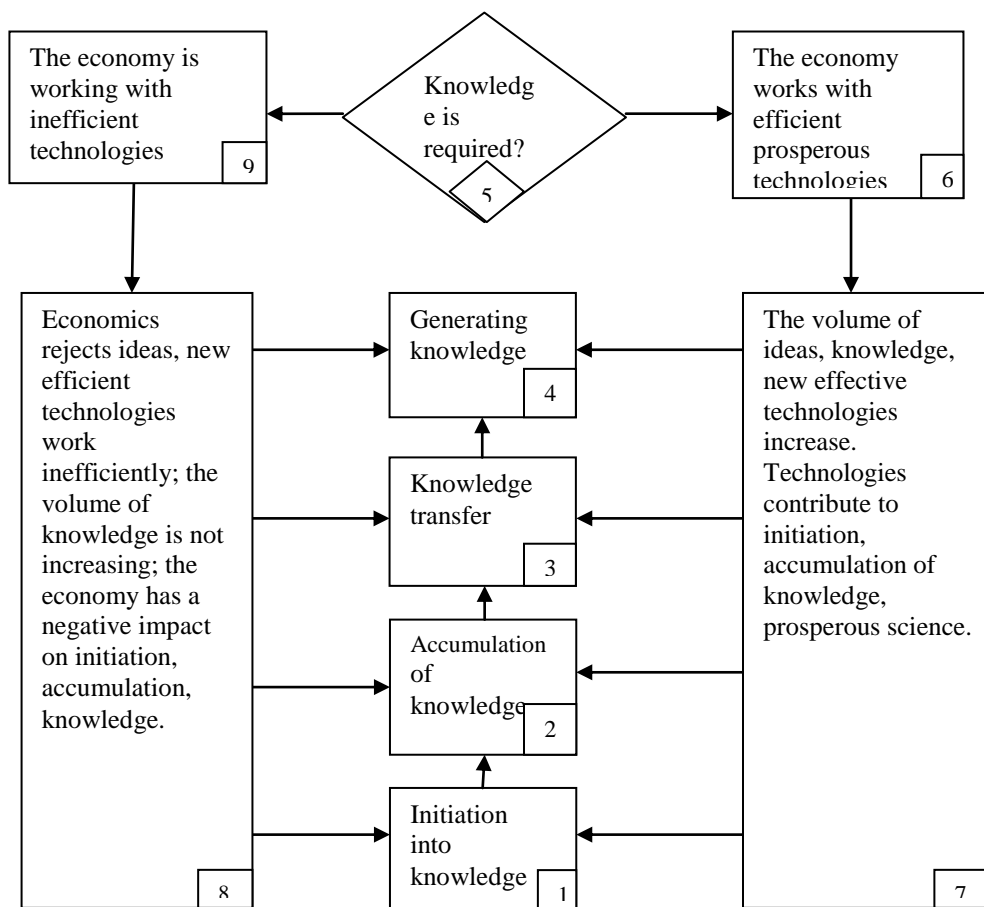


Figure no. 1 Block diagram "The Evolution of knowledge"

If we will speak about knowledge management, it is probably necessary to define or correctly say to interpret the notion of knowledge. Some authors (Wiig, 1995) consider that knowledge can provide useful information. In such cases it is necessary to define the notion of information. The notions in our case, knowledge, information, more correctly, are not to define them but to interpret them. The information is constituted:

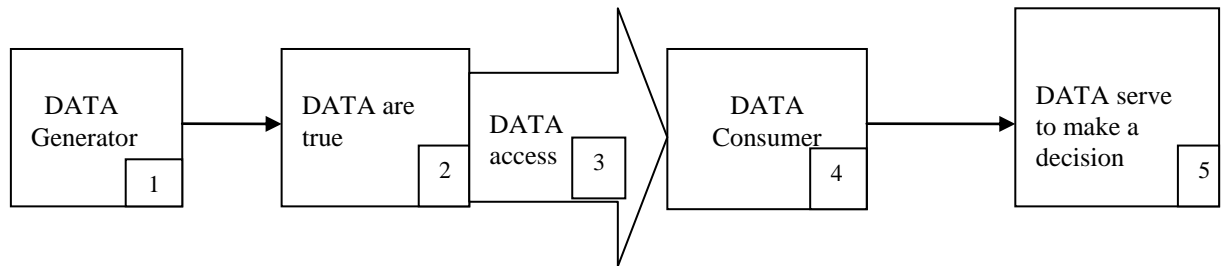


Figure no. 2 Schematic block "INFORMATION"

(1) - Dates, its must be true; the dates consumer is required; he (the consumer) must have access to reliable data; data become informative only if they (dates) are the basis of a decision. The definitions of knowledge by the presence or lack of information is highly questionable. In this case it can be said that knowledge are the products of the data generator. At our point of view knowledge are the capacities of a person or a group of people to generate ideas. Ideas are not identical to knowledge, they are just the product of capabilities. Knowledge management could be identified with managing the evolution of people's capacities to generate ideas, innovations. Knowledge are invisible assets, are intellectual "muscles", are capacities that in some cases can manifest themselves, others are not required.

Knowledge may be general, may be specifically required in the internal activities of companies, firms, ministries etc. The general knowledge of all kinds in the Republic of Moldova is coordinated by the state, they are part of an education system, which is in constant modernization. The system contains: (1) - educational institutions by types; (2) - teaching staff by type of institution; (3) - records of students, students by types of institutions; (4) - number of pupils, students by type of education per 10 thousand inhabitants; (5) - the number of graduates by type of institution; (6) - the number of graduates by type of institution per 10 thousand inhabitants; (7) - the number and promotion of doctoral candidates; (8) - the number and promotion of postdoctoral students (Tables 7-8). Reducing the number of the population, increasing the number of emigrants in the country generated negative trends in the number of educational institutions by types (Table 1). Compared to the academic year 2012-2013, namely in 4 years, the number of schools, gymnasiums, lyceums decreased by 5% in the 2015-2016 year of study; secondary vocational technical education institutions by 30%; of post-secondary technical vocational education institutions by 4%; of higher education institutions by 9%. There is no explanation for a 30% reduction in the number of institutions preparing workers. On average, in 4 years (2012-2016), the number of educational institutions has decreased by about 12%, with all the negative consequences that society will suffer. In this context, it is natural to reduce the teaching staff by types of institutions. Compared to 2012 (the year is taken arbitrarily), the teaching staff in schools, gymnasiums, lyceums decreased by 13%; in the secondary vocational technical education institutions decreased by 14%; in the post-secondary technical vocational education institutions - by 8%; in the higher education institutions by 12%. In the meanwhile 12% of the teaching staff, who are likely to re-qualify, will emigrate. Negative trends, the reduction of the number of education

institutions, teachers are the consequence of reducing the number of students (Table 3). During these 4 years the number of pupils in schools, gymnasiums, lyceums decreased by 9%; of the secondary technical vocational schools - by 18%; of the post-secondary ones - by 11%, from universities - by 20%.

Table no. 1. Educational institutions by types (a. 2012-2013-100%)

		2012-2013	2013-2014	2014-2015	2015-2016
1	Schools, gymnasiums, high schools	1	0,98	0,96	0,95
2	Secondary technical vocational education institutions	1	1	0,91	0,7
3	Post-Secondary technical education institutions	1	0,96	0,96	0,96
4	Higher education institutions	1	0,94	0,91	0,91

Table no. 2. Teaching staff by type of institution (a. 2012-2013-100%)

		2012-2013	2013-2014	2014-2015	2015-2016
1	Schools, gymnasiums, high schools	1	0,94	0,9	0,87
2	Secondary technical vocational education institutions	1	0,95	0,95	0,86
3	Post-Secondary technical education institutions	1	0,96	0,92	0,92
4	Higher education institutions	1	0,95	0,9	0,88

Table no. 3. Students by type of institution (a. 2012-2013-100%)

		2012-2013	2013-2014	2014-2015	2015-2016
1	Schools, gymnasiums, high schools	1	0,96	0,93	0,91
2	Secondary technical vocational education institutions	1	0,93	0,89	0,82
3	Post-Secondary technical education institutions	1	0,95	0,97	0,99
4	Higher education institutions	1	0,95	0,87	0,8

Table no. 4. Pupils, students by type of institutions at 10 thousand (a. 2012-2013-100%)

		2012-2013	2013-2014	2014-2015	2015-2016
1	Schools, gymnasiums, high schools	1	0,96	0,93	0,91
2	Secondary technical vocational education institutions	1	0,93	0,89	0,82
3	Post-Secondary technical education institutions	1	0,95	0,98	1
4	Higher education institutions	1	0,95	0,88	0,8

Table no. 5. Graduates by type of institutions (2013-100%)

		2013	2014	2015	2016
1	Schools, gymnasiums, high schools	1	0,94	0,87	0,78
2	Secondary technical vocational education institutions	1	1	0,93	0,88
3	Post-Secondary technical education institutions	1	1	0,88	0,85
4	Higher education institutions	1	0,93	0,91	0,88

Table no. 6. Graduates by type of institutions at 10.000 places. (2013-100% year)

		2013	2014	2015	2016
1	Schools, gymnasiums, high schools	1	0,94	0,87	0,78
2	Secondary technical vocational education institutions	1	1	0,93	0,9
3	Post-Secondary technical education institutions	1	1	0,86	0,86
4	Higher education institutions	1	0,93	0,91	0,89

Table no. 7. Number and promotion of doctoral candidates (2012-100%)

		2012	2013	2014	2015
1	Number of institutions with doctorate activity	1	1,04	1,06	0,91
2	Number of PhD students	1	1,02	1,1	1,18
3	PhD graduates	1	0,92	0,97	0,92

Table no. 8. Number and promotion of postdoctoral students (2012-100%)

		2012	2013	2014	2015
1	Number of institutions with doctorate activity	1	1,11	1,06	1
2	Number of PhD students	1	0,9	1,05	1,2
3	PhD graduates	1	1,12	1,06	0,82

On average, the number of students dropped by 12% in 4 years. The same trends were maintained for the number of pupils, students to 10.000 inhabitants. On average, their number decreased by 12% (Table 4). The number of graduates, schools, gymnasiums, lyceums in 4 years (2012-2016) decreased by 22%; secondary technical education institutions - by 12%; of post-secondary technical professional institutions - by 15%. The educational capacities and the number of graduates in all educational institutions decreased by about 13% in 4 years.

Another trend can be observed in the field of PhD students' training. In 2013, compared to 2012, the number of doctoral students in the Republic of Moldova increased by 11%; have graduated 13% more. The quality of general knowledge in the profile of all institutions is now "identified" by a "hard" control system equipped with video cameras, audio, with the "relocation" of the graduates in places different from those where they was studing e.t.c. The rating system may be successful, but it is certainly expensive. Only cameras and outside assistants require finance that could be used to develop the infrastructure of educational institutions. An alternative, in our view, would be: each institution estimates the knowledge of the graduates at their own discretion. The graduate,

in the continuation of his or her career, either continues his studies or commits to work, is obliged to confirm additionally through the admission system. In this system, the student, the student endeavors, the educators help him to succeed in the next stage of his career. The system could also be supported by drainers, economic, social mechanisms, stimulating pedagogical groups to increase their quality of work. The necessity of estimating the knowledge of graduates, not by "controllers" from the outside, but by the "natal" institution, where the student has made his studies, can be interpreted metaphorically: no painter, no musician, no sportsman e.t.c. they did not become a painter, musician, sportsman (champion) etc., because they had the grade 10 at the institutions where they did their studies, but because they confirmed the grade 10. Admission examinations, traditional as they were 20 years ago, contributed to the increase of the quality of knowledge, the teaching was required for classes of meditation, for additional intellectual work. The enrollment of high school graduates, at university-based grades, has considerably reduced the quality of knowledge. In this context: for graduates who do not continue their studies but are arranged for work, periods of 5-6 months of internship are required, when the graduate has succeeded in confirming the studies, the quality of the knowledge. The experience of highly developed industrial countries: anyone who is a specialist in the field of employment in another country is obliged to confirm his medical knowledge.

Knowledge management categorically differs from the management of an economic activity. Knowledge Management (MC) is an unprecedented activity in time and space. Intangible assets (knowledge) can not always be quantified. Salaries of staff, as a rule, do not reflect the price of their knowledge (staff). Knowledge can be "procured" (paid studies), can be "appropriated", can be "passed" to other people. This flow occurs only in cases when staff are motivated to acquire, transmit. Intellectual work, unlike the physical one, is the "creature" of man and not of nature. That's why intellectual work requires emotional, psychic efforts.

Knowledge at the abstract level is created by mankind. In the last decades, the emergence of information technologies, the Internet that allows for the most varied ideas changes, technologies e.t.c. have contributed to the evolution of knowledge, to the need of retraining the staff, to the improvement of the study programs e.t.c. The knowledge of the staff is the intellectual chapter of the company, the company, the country. The most effective investments for everyone are investing in intellect, developing creative capacity, increasing the amount of knowledge. Knowledge management is a new, new field with new concepts, with new methods, with new technologies, with new structures e.t.c. Additionally, man accumulates knowledge, some of which will not be applied in later activities. In this case it can not be said that some knowledge (the unsolicited of life) were in addition. All knowledge, including unused ones, generates two effects: (1) - develops how to think, analyze, create; (2) - are useful in subsequent activities. Knowledge Management is a new domain set up by Wiig, 1993, 1994, 1995 (Wiig, 1995). However different the knowledge is, they need to be embedded in a system, need to be upgraded, expanded. For anyone knowledge is a social "support"; for companies, firms knowledge of staff is the rating, their ability to overcome difficult situations.

Conclusion

Everybody needs knowledge. In the Republic of Moldova, however, it is difficult to meet a company that would finance the processes of knowledge accumulation by its own staff. In principle, it is necessary for companies, firms to develop or use outsourcing services to develop methodological guidelines. Staff, annually or twice a year, must be required to undergo exams to know the methodological guidelines. Such exams are also

necessary for technical, technological, organizational considerations. The employee must have a profound knowledge of the profile of his / her duties.

References:

1. Babii, L., 2011. Scientific argumentation of managerial decisions: the methodological aspect. *Scientific Review "Economic Studies"*, 1-2, Chişinău.
2. Babii, L., 2011. Recycling of cadres: economic aspect. *"Economic Studies" Magazine*, 1-2, Chişinău.
3. Babii, L., 2014. Skills and responsibilities of a managerial team leader. *"Economic Studies" Magazine*, 1, Chişinău.
4. Maximilian, S., 2009. *The Modeling of Economic Processes*, USM.
5. NBS, 2016. *Moldova in figures - 2016*.
6. Wiig, K., 1995. *Knowledge Management Methods: Practical Approaches to Managing Knowledge*. Arlington: Schema Press, TX.