# Intellectual capital management as the aspect of upgrading of modern companies management

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Abstract. The main tendency of the social labour development today is its intellectualisation which shows up in the increase of specific gravity of people involved in intellectual labour, increase of the intellectual labour significance in the society. Intellectual labour plays a significant role in all the spheres of modern production. Performing functions of intellectual labour demands a worker's corresponding abilities, definite intelligence level, high level of professional and general knowledge and company administration's reasonable use of intellectual potential with a view of transforming it into the company's intellectual capital. The goal of this article is the systematization of modern approaches to the concept of intellectual capital, its structure as well as interrelation and difference between various terms used in this sphere (e.g. intangible assets, intellectual potential and goodwill). A special place is occupied here by investments to intellectual capital, their types and peculiarities.

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#### Introduction

Significant changes of the factors that determine the competitive ability and market power of modern companies under the conditions of modern economy. First of all it refers to the decrease of cheap raw material and labour power factor value and increase of educational factor. In the economy, moved by innovations, the tendencies of society transformation are being developed generally due to the complex character of the process of knowledge use and exchange, both in production and beyond it; a significant role is paid to the effective use of workers' intellectual potential with the aim to increase their labor capacity. "As far as I remember we still did not produce any acquisition, but only acquired talents which, to my mind, is one of the best things that one could have done" (Mark Elliot Zuckerberg). These words by Mark Zuckerberg - the developer and founder of Facebook Company display modern tendencies of the development of companies having a significant part of mental (intellectual) labour.

The decrease of workers number, increase of their intelligence level, use of complex equipment and computers allowed creating bigger added value than it is for the assembly lines on which undereducated people used to work. There increased the role of knowledge in consulting, financial and insurance business, pharmaceutical production, programming, advertisement, journalism, television, healthcare, education and entertainment industry - the

most rapidly growing spheres. That's why by evaluating assets of a modern company the growing attention is paid to its intellectual assets or intellectual capital.

## Body

A lot of Russian and foreign scientists tend to consider the category of intellectual capital as a new and young one, however a well-known scientist E. Brooking notes that "intellectual capital has been existing in all times: it appeared when the first Cheap Jack established good relationships with a buyer. Then it was called "an honest name" [1]. This fact shows first of all investigators' wide differences of opinions concerning the essence of intellectual capital and economical categories connected with it; secondly it shows how deep and many-sided is the content of the phenomenon under investigation.

Intellectual capital is the most important component of business assets of an enterprise that is functioning in the conditions of post-industrial information society. The following fact displays the significance of the intellectual capital in the activity of a modern organisation: At making the choice of long-term partners American managers judje by the fact that the company's intellectual capital must amount not less than 40% in the common capital structure, only in this case the company is considered to be prospective [2].

Modern ideas of intangible production factors of new cost are embodied in the concept of

"intellectual capital". Managers, who administrate the cost of the company, are common in their opinion concerning the name of this phenomenon, its content and in the fact that modern bookkeeping cannot take into account these new assests (employees' competence, clients' attitude, computer administrative systems, data bases etc.) [3]. Some of investigators state that a new financial and managing concept is needed to account intellectual capital [4]. Financial experts discuss on the fact whether they should change traditional book-keeping terms (intangible assets, commercial goodwill) and whether there should be a possibility of cost estimate of a new index, its account and display in reports.

Thus, intellectual capital is ability, embodied in a human, of bringing profits for the account of use of knowledge, abilities, generating ideas, professional skills, creating of scientific and art works. It brings profit not only to its owner, a certain person, but also to the organisation in which hi/she works, region and to the whole country. The intellectual capital of a separate person can be of global importance. As during the science development it is not only intellectual innovations are being created (on the basis of these innovations new production technologies and consumption methods are being formed), but also the development and transformation of people are taking place and, consequently, the development of intellectual potential of an organisation and the whole society.

Intellectual potential of an organisation is the total of creative, informational-intellectual, professional-qualification resources as well as organisation systems of their management which are created and used both within an enterprise and beyond it with an aim to form unique competitive strengths [5]. Let us point out another one peculiarity of intellectual capital - it is being formed and brings income not only for account of human potential, but also by using material potential (technology, equipment etc.). That means that intellectual capital synthesizes elements of human and material capital [6].

To our mind one of the most important factors that determine the formation and development of intellectual potential, its transformation into intellectual capital and its rational use is *education as well as accumulation ad use of knowledge*. One of the main specialists of the theory of human capital and education economy T. Schultz has come to the conclusion that "incomes for education are relatively more attractive than those for human capital" [7]. Some researchers, both Russian and foreign, place a priority on constant education during the development of intellectual potential and growth of intellectual capital. It's difficult to disagree with this.

The formation of new social and economic order, often called "post-industrial society", is according to the opinion of Japanese researcher T. Sakaya [8] connected to the so-called «knowledge-value revolution» embodied in knowledge. World educational standards are gradually transforming under the influence of information qualities change: contact, authoritarian educational type is added by the distance, interactive one, the basis of which are the same computer technologies, in result of this the continuity of education, implemented in the "the whole-life-education" model, has been forming and became an integral quality it.

Eduction is very important; it brings high income not only to an employee but also to the employer. The specialists of our century [9] have stated that in the result of intellectualisation of labour and rapid growth of its productivity in industry and agriculture, 2 % of able-bodied population of Earth could satisfy the needs of other people on the planet approximately in 30 years. Today in industrially developed countries the ratio of employed does not exceed %, and the ratio of people involved in material production does not exceed 20%.

Thus, the analysis and evaluation of an enterprise's intellectual potential can help to solve the following tasks:

- restructurisation (which functions should be emphasised in a new structure and which ones should be combined, removed etc.):
- revealing of more effective mechanisms of labour motivation on the basis of human potential;
- corporate culture expansion by means of creating knowledge base which contains information on every element of an enterprise's intellectual potential.

The study of the problem of intellectual capital from the point of view of global changes in the world economy, appearing of "knowledge economy", management of knowledge in hi-tech knowledge-consumptive companies leads as a rule to the conclusion of the conceptual concordance of similar concepts - intellectual capital and intangible assets. The approach of L. Edvinsson - one of the world leading specialists in intellectual capital - is quite demonstrative: in the Intellectual Capital journal in his article "The prospects of intangible assets and intellectual capital - 2000" he points out that the new branch in the creation of costs in a new economy is "the so-called intangible sphere or the sphere of intellectual capital" [10]. E. Brooking supports this thesis: "Intellectual capital is the term for the definition of intangible assets without which a company cannot exist now" [1].

A special attention is paid to the issue of correlation of concepts of intellectual capital and goodwill, as the appearance of the first one is connected to the attempt of economists to explain the growing difference between the market capitalization of companies and book value of assets. At the beginning this difference arose in hi-tech companies and was considered as their specific feature. Today the the excess of commercial value of a company over the cost of its assets reflected in cash flow can be observed in any company which has some competitive strengths (for example, SGL Carbon company - a manufacturer of electrodes for iron-andsteel industry - has a two-fold excess of market capitalization over the book value of assets [11]). Economists think that the reason for this gap is the company's assets which are not reflected in the cash flow, or company's intellectual capital. Therefore it's not about the investors pay up at buying a prospective company, but about they pay both for fixed and intangible assets. Accountancy requirements allow reflecting in cash flow only a part of intangible assets, all others are recognized in goodwill with a single sum. Consequently the intellectual capital serves as the content of goodwill and explains its inner structure. In this sense the concept of intellectual capital is a progress comparing to the concept of a company's goodwill that has existed several centuries ago.

At the same time we should dwell on an issue of investments to intellectual potential, its formation and development.

It is reasonable to divide the investments to intellectual potential into 2 categories - direct and indirect. Direct investments to intellectual potential are considered to be expenditures for general and special education, professional training and retraining on the factory floor, planning and motivation of career advancement, implementation of scientific researches and developments and fulfilment of creative tasks, purchase of specialized literature, attraction of outsourcers and advisers. Indirect investments are expenditures for maintaining health and medical care (medical insurance), purchase and creation of information technologies and corresponding equipment.

Basing on the above said one can point out three main groups of investments to intellectual capital:

- expenditures for education including professional training of personnel, professional improvement (advanced professional training) and professional retraining;
- expenditures for healthcare consisting of expenditures for disease prevention,

medical services, dietic food, housing improvements;

• expenditures for career planning of personnel.

We emphasize the following peculiarities of the investments to intellectual potential:

- investment efficiency to intellectual potential directly depends on the lifetime of its bearer, i.e. on the duration of working life;
- in consequence of investments intellectual potential accumulates and multiplies;
- as intellectual potential accumulates its profitability increases to the limit, restricted by the upper bound of active working life and then it decreases;
- comparing to the investments to the other forms of capital, investments to intellectual potential bring big social-economic profit;
- it is quite difficult to define the payoff of investments;
- ✓ payback period of investments is long;
- investments to intellectual potential bring the organisation a significant and various effect including the increase in productivity, effectiveness and quality of personnel labour.

### Conclusion

Thus, a modern manager needs to remember that intellectual potential the main component of which is education is the most important factor influencing the salary of a worker, his/her attitude to the job, productivity and effectiveness of his/her labour as well as the level of state economy development. In summary we can note that the intellectual potential administration is one of the main tasks of management for successful development of an enterprise, optimisation of its main aspects of business activities.

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#### References

1. Brooking, E., 2001. Intellectual capital. St. Petersburg: Piter, pp. 288.

- 2. Kokorev, I.A., 2002. Organisation staff management i the light of human capital assets theory. PhD thesis, Moscow.
- 3. Petty R. and J. Guthrie. 2000. Intellectual Capital Literature Review. Measurement, reporting and management. Journal of Intellectual Capital. 1 (2): 155—176.
- Dzinkowski, R. The measurement and management of intellectual capital. Management Accounting (UK), 78 (2): 32-36.
- An'shyn, V.M. and A.A. Dagaev, 2006. Innovative management: Concepts, multilevel strategies and mechanisms of innovative development: Educational medium. Moscow: Delo, pp: 584.
- 6. Asaliev A.M., Poltarykhin A.L., Alkhimenko O.N. Intellectual capital: theory and approaches

- of its assessment on macro level // World Applied Sciences Journal 30 (10): 1404-1408, 2014.
- 7. Schultz T. 1964. Investment in Human Capital. Economic Growth an American Problem. Englewood Cliffs. pp: 126.
- 8. Sakaya T. 1999. Cost created by knowledge or History of the future. New post-industrial wave in the West. Anthology. Moscow. pp. 340-371.
- 9. Klimov, S.M., 2002. Society's intellectual assets. St. Petersburg: IVESEP. Znaniye, pp. 41.
- 10. Edvinsson, L. 2000. Some perspectives on intangibles and intellectual capital 2000. Journal of Intellectual Capital. 1 (1): 12—16.
- 11. The Carbon Company. Date Views 07.02.2014 www.sglcarbon.com.

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