

## Technique of measurement of value of the human capital as intangible asset of corporation

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**Abstract.** Development of economy of knowledge is connected with practical application of the theory of the human capital in which the human capital becomes an intensive factor of development. It assumes search of new methods and tools of a quantitative assessment of considered category and its influence on results of activity of corporation. In this article the author offers a technique of measurement of cost of the human capital based on the western approach of an assessment of profitability of the personnel and investments into its training. She will allow to develop effectively possibilities of employees, in due time to reveal problem areas in human resource management, to involve all capacity of the organization and to provide growth of value of corporation.

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### Introduction

Nowadays, in the modern world knowledge concentrated in such resource of production as a human is the most dynamic sphere of development of economy. For determination of efficiency of activity of a company it is meaningful that human capital becomes its asset demanding a systematic assessment, careful attitude, diffusion, and use.

### Analysis of the research and publications

As the independent section of the economic analysis the theory of the human capital was issued at a boundary of the 50-60th years of the 20th eyelid. The merit of its promotion belongs to the known American economist, the Nobel Prize laureate T. Schultz, and the basic theoretical model was developed in G. Becker's book (also the Nobel Prize laureate) "The human capital" (the first edition of 1964). Further Y.Ben-Poret, M. Blauga, E.Lezer, R. Leyard, J. Mintser, J. Psakharopulos, Sh. Rosen's works, B. Chizuik, U. Bowen, E. J. Dolan, L. Turrou, Jac Fitz-entsa were important. Such foreign researchers, as P. Druker, T. Stewart, I. Ross, I.Khoroyaki, T.U.Roykhl, G. Shtumpf, M.D.Makmaster were engaged in questions of studying of essence of intangible assets and the human capital [1, 2, 3, 4]. In a control system of human resources foreign economists were engaged in research of problems of formation and use of registration information generally: S. Bryu, R. Germanson, F. Krendal, R. Laykert, K. Makkonell, M. Malone, M. Matthews, M. Perera, A.Edvinsson and E. Flamkholts.

### The object of this research

In our opinion, it is necessary to understand human capital not only as a result of investments and the stock of knowledge saved up by a human, his skills and motivations which are expediently used in this or that sphere of public reproduction, promote labor productivity and production growth and, thereby, influence on growth of the income of this person, but also an opportunity for self-realization [5, 6]. This definition, in our opinion, is full; it is used in this work as initial and sufficient for the solution of the tasks.

### The aim of research

According to the fundamental principles of accounting "assets are the economic resources supervised by the enterprise which cost can be objectively measured and its usage will possibly make profit in the future". Therefore, in our opinion, it is necessary to admit the human capital of the enterprise as a non-material asset of the enterprise which influences market value of the enterprise, and also business reputation of the organization.

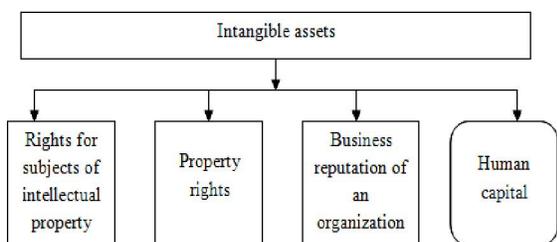
### The methods of research

In our research we offer to be based on profitable model of managing of economic subjects according to which the fund of compensation is a part of the income, instead of organization expenses. The profitable model with the mechanism of formation of fund of compensation changes a personnel place, from a production element staff turns into participants of the income of the enterprise.

### The main results of research and their justification

Human capital isn't allocated as an independent element of accounting. It doesn't allow to estimate objectively an impact of the human capital on the level of efficiency of production and economic activity of subjects of managing. In this regard its allocation into a separate position of the account and estimation is advisable. Then the structure of intangible assets will look as follows (fig. 1) [7, 8, 9, 10, 6, 11, 12, 13].

Thereof there is a problem of measurement of this type of asset to establish a correlation between results of use of employees and the financial results received by the company. In the course of development of a technique of measurement of value of the human capital we were based on profitable model of managing of economic subjects which, in turn, was based on concept of the value added determined by subtraction of material costs and amortization from proceeds of production sales.



**Fig. 1. Structure of intangible assets of subjects of managing.**

Based on the results of author's research

Based on stated above, we introduce a term of Human Capital Value Added (HCVA):

$$\text{HCVA} = \text{Pre-tax profit} + \text{Salary} + \text{Discounts} + \text{Investments into education of personnel (1)}$$

In our opinion, the higher is a skill level of workers and the more regular innovative processes are carried out, more often there is a need of the appeal to profitable model. It is known that expense is impossible to define precisely in the innovative sphere. Labor here is always individual and unique and the accepted methodology of rationing of material costs and labor costs isn't applicable in the production sphere. In the sphere of innovative activity it is necessary to be guided not so much by expenses, but by results.

### Result

Application of technologies of management of the human capital shows that it reaches the following goals:

a) a basis for business development is created by:

- formation of potential corresponding to development business – strategy;
- ensuring growth of efficiency of activity – formation of assets;
- balanced decisions on the basis of the potential of staff, information, measurability and assessment of actions and results;

b) competitive advantages are reached by:

- attraction and preservation of the best experts due to advantages in the organization and management of work;

- high labor productivity level on the house of the organization and management of its potential, work and relationship of workers;

c) the increment of financial results - growth of the income, profit, capital cost is provided by:

- application of financial estimates to use of the human capital;
- catalyzing of processes of growth of cost of the capital expressed in goodwill;
- receiving more fair estimates of quality of decisions, efficiency of activity, an anticipation of crises in development.

Use of a technique of measurement of human capital value of the organizational and the analysis of its influence on financial results of the organization allows to consider existence of such type of intangible assets of the enterprise as the human capital forming value of business in general.

In modern practice of accounting there are four methods of representation of human resources in financial statements such as instruction in the report of the chairman of the board, in the report on change of intangible assets, in the explanatory note unliable to audit or direct integration in balance. The choice of this or that method is represented to the user.

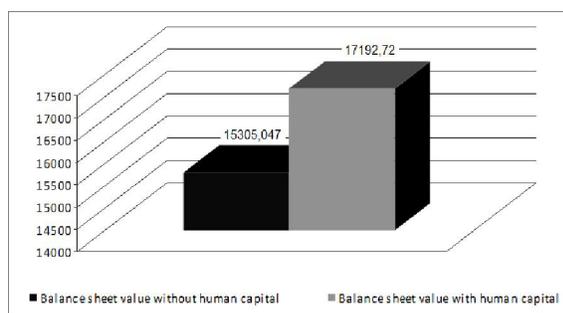
Capitalization of the human capital in the administrative reporting as intangible asset is offered by us on the basis of expensive approach in previously estimated size of salary, bonuses, social privileges, investments into training and others. It should be noted that in this case the employment contract is signed with the employee for a certain term that for accounting will be accepted as term of useful use of an asset and to be used for depreciation charge. For determination of size of depreciation charges the cost of intangible asset at the time of the termination of term of useful use is accepted equal to zero, if there are no proofs of that it can be different. Existence of the active market for object on which it will be

possible to estimate its value in the future and high probability of preservation of such market to the termination of term of useful use of object can be an example of such proof. In case of extension of the employment contract unamortized cost for date of the amendment is distributed on new period of validity of the contract [14].

After recognition human assets are reflected in balance at initial value minus saved-up depreciation and losses from depreciation. At the same time application of alternative approach is revaluation of the human capital as intangible asset is allowed. In this case the object of intangible assets is shown at fair value for revaluation date minus saved-up depreciation and losses from depreciation. We recommend to define fair value in the presence of the active market for concrete object and in case of change of the amount of the paid remunerations.

As well as all intangible assets, the human capital is written off from balance when quitting. Besides, it has to be written off if it doesn't bring future economic benefits. Profit or loss which is forming at quitting of object as a difference meanwhile that the company receives at his quitting, and residual cost, are reflected in the account as the income or expenses. For decrease an uncertainty, in case if the employee will quit the company, it is possible to create a reserve for quitting.

Thus, at the accounting of the human capital of OJSC "TATENERGO" in balance as intangible asset we receive growth of balance cost by 12,33% (fig. 2).



**Fig. 2. Changing of balance sheet value of OJSC "TATENERGO" at the end of studied period (mln.rub.)**

### Conclusions

Proceeding from the aforesaid, it becomes obvious that for successful management of the human capital as intangible asset of the organization, obtaining benefits and advantages in the conditions of highly competitive economic environment it is necessary:

- to realize that the human capital is the main productive force which defines success, productivity and business value;
- to provide measurability of potential and work on the basis of positioning in financial structure of business, an assessment of level of their use and results;
- to achieve systemacity and complexity of application of technologies in the organization and management of the human capital;
- to provide favorable working conditions and comfortable relationship for receiving a synergy of opportunities of the human capital.

Approach of information era led to the human capital which becomes the main competitive advantage and, undoubtedly, has impact on the size of value of corporations. Recommendations for management of the human capital as tangible asset can be used in various spheres of business as the person plays a significant role in economic activity of subjects.

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