

Раздел 4. «Социально-гуманитарные науки Экономика»

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Assessment of the intellectual capital of an employee of an organization

Significant changes are characteristic of the current stage of economic growth, when intangible assets take center stage in determining the competitiveness of the economy. The necessity for research into the nature and methods of evaluating a phenomenon known as "intellectual capital" is highlighted by these developments from the viewpoint of economic science. Due to each author's unique method of understanding this, there is still no clear consensus on what the term entails. The article provides a general review of several theories for defining the nature and composition of intellectual capital and explores evaluation options. Education is acknowledged as one of the key prerequisites for the intellectualization of work in the modern world. The evaluation of the teacher's intellectual capital and content-related concerns are also growing in significance in this context. These include his property, knowledge, abilities, and skills that he can and will currently impart to pupils, laying the groundwork for building intellectual capital for future professional activity. The article outlines a method for evaluating a teacher's intellectual capital in a higher education setting using an electronic portfolio.

Keywords: intellectual capital, knowledge, intangible assets, human capital, social capital, structural capital, assessment of intellectual capital.

Introduction

The term 'intellectual capital' has recently gained popularity in the literature on global economics, along with terms like 'intangible assets', 'intellectual potential', and 'knowledge assets'. Knowledge, information, experience, organizational capacity, and information conduits are all types of intellectual capital that may be leveraged to build wealth. In other words, the competitiveness of businesses results from all that workers know and have.

J. Galbraith brought the term "intellectual capital" into the scientific community in 1969. T. Stewart was the first to thoroughly prove and broadly promote this idea. He described intellectual capital as the whole of all that a firm's employees know and what provides the organization a competitive edge in the market in the essay "The Power of Intelligence: How Intellectual Capital Becomes America's Most Valuable Asset" (1991) [1]. The meaning of intellectual capital was later refined. Thus, L. Edvinson of Scandia described intellectual capital as information that could be turned into value [2], while L. Prusak of IBM defined it as intellectual property that has been formalized, processed, and used to raise the value of the company's assets [3].

The earliest writings on intangible assets appeared in the works of neoclassical economists in the 1960s. According to M. Friedman [4], the so-called humanitarian capital is one of an enterprise's assets. Besides, he outlined some of its characteristics in connection to other capital-related elements.

Research findings and their discussion

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At the end of the 80s, K.E. Sweibi [5] developed a detailed structure of intellectual capital (intangible assets).

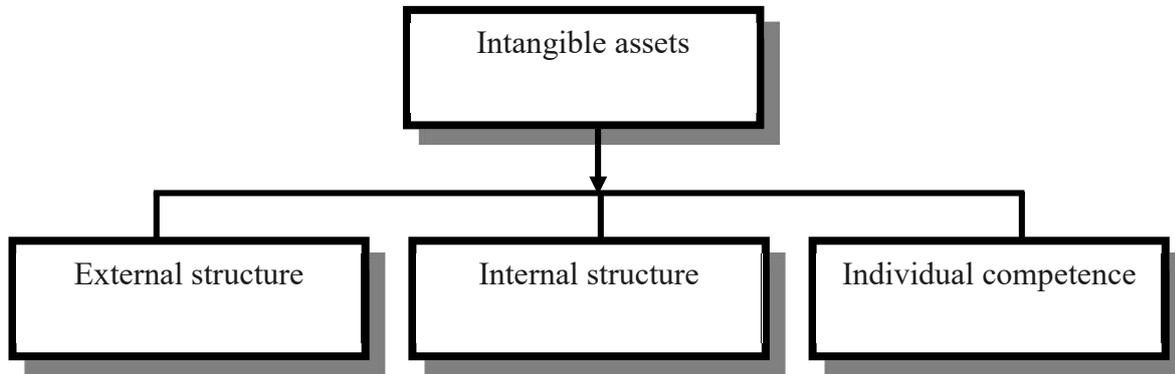


Figure 1 – Structure of intangible assets

Individual competency, a company's internal structure, and its external structure are the three primary parts of intangible assets, which the author frequently equates to intellectual capital (Figure 1).

According to Swaby, individual competence refers to a person's capacity to operate in a variety of circumstances. It encompasses skills, education, expertise, values, and social skills and corresponds to the conventional definition of human capital. The internal factors of a company, such as its goals, objectives, models, technologies, computer and administrative systems, make up its internal structure.

The relationships with customers, suppliers, rivals, trademarks, and reputation or ‘image’ compose the company's external structure. In particular, practically all scholars have noticed that human capital, or what Swaby refers to as individual competency, is highlighted alongside internal and external resources.

This plan is described in further detail in the structure of intellectual capital put out by Leif Edvinsson, who made management of the company's intellectual capital history by becoming the first senior manager ever to hold such a position (Scandia insurance company). He employed the following plan in 1993 when creating the Scandia Navigator intellectual resource monitoring system for it (Figure 2) [6].

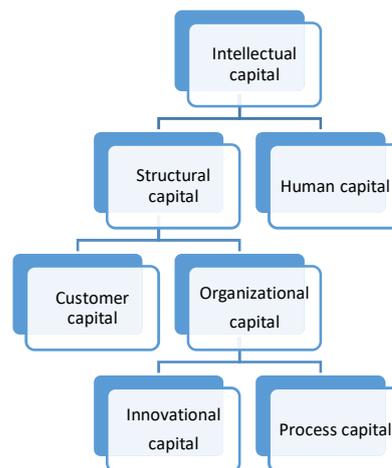


Figure 2 – The structure of intellectual capital according to L. Edvinsson

Another example is the intellectual capital structure used by TB Brocker (Figure 3).

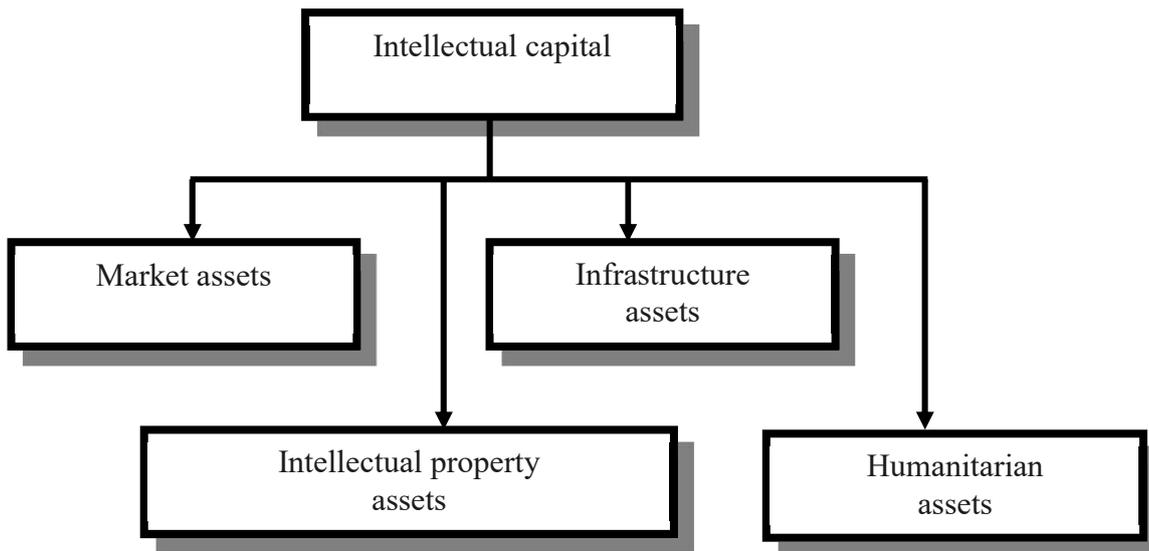
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Figure 3 – The structure of intellectual capital used by TB Brocker

Although many rely on the innovations of foreign colleagues, domestic scientists perceive the fundamentals of the idea of ‘intellectual capital’ and its structure from a slightly different perspective.

The intellectual capital of a subject is defined as the total cost of intellectual assets available to them, including intellectual property, their innate and acquired intellectual abilities and skills, as well as the knowledge bases they have accumulated and effective networking with other subjects, according to the Russian scientist Leontiev B.B. The primary purpose of intellectual capital is its capacity to significantly speed up the growth in the mass of profit as a result of the creation and application of knowledge systems, objects, and relationships that are essential for the enterprise and guarantee its highly effective economic activity. Intellectual property is a crucial component of intellectual capital. Intellectual property may be assessed and exploited realistically, in contrast to intellectual skills, which are challenging to quantify using numbers or other numerical measures. Good technological and aesthetic solutions are also a product of intellectual capital, which goes beyond simply being smart. This is a technique for sustaining the intellectual advantages of a certain company or organization in the market. [7].

Only when three aggregate states of matter and capital—physical, financial, and intellectual capital—are integrated in the environment do nature and business exist.

Physical capital includes items like tangible assets and other elements that can provide surplus value.

Financial capital is comprised of the holders' deposits as well as the cash flows that support and fuel its expansion (cash, checks, letters of credit, transfers, shares, etc.).

Any enterprise's foundation and main source of funding is its intellectual capital. This kind of capital may be observed and assessed but not physically grasped. This is the most erratic and sensitive kind of capital.

One may also take into account the methods of T. Stewart, E. Brooking, etc. when assessing intellectual capital.

Human, structural, and consumer capital, according to T. Stewart, "has no material form, but reflects knowledge as a source of value - yet at the same time concerns things that business people can touch and even embrace." [8].

The author suggests ways to measure intangible assets in accordance with such areas as:

- 1) intellectual capital in general
- 2) human capital
- 3) structural capital –
- 4) consumer capital

E. Brooking suggests conducting an audit of intellectual capital and considers its assessment in the accounting sense in order to help understand the value of the company, assess its success and development, find a basis for finding funds and obtaining loans, etc. [9].

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K.E. Sweibi illustrates the relationship between the value of tangible assets, or book value, of a company (B), its market value (M) and the value of its intangible or intellectual assets (Figure 4.).

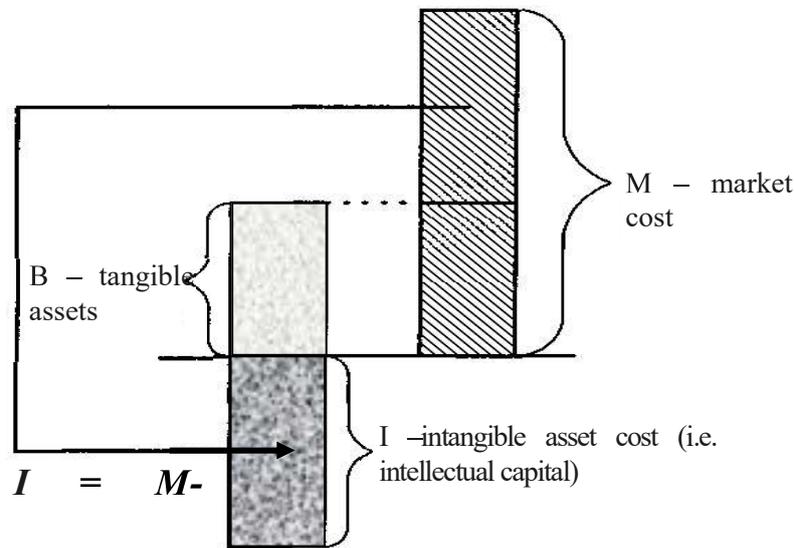


Figure 4 – Company assets and its market cost

This relation can be represented by the following formula:

$$I = M - B. \quad (1)$$

When the worth of a company's intellectual assets is calculated in this way, it might be exceedingly high.

When considering intellectual property as one of the categories of intangible assets, B.B. Leontiev advises evaluating an intellectual property object's functioning, which will enable forecasting (with a certain level of accuracy) the projected profit from its practical usage in three to four years. Then, it will be possible to calculate the conditional market value of intellectual property based on this information.

Taking into consideration the range of techniques employed there, intangible assets are currently most often valued in the CIS nations using three approaches:

1. costly
2. comparative;
3. profitable

We may draw the conclusion that, at the moment, the evaluation of an individual employee's intellectual capital is essentially not taken into account owing to the examination of various approaches to intellectual capital assessment. A general assessment of an organization's intellectual capital is made everywhere. Hence, it is necessary to design a method for evaluating the individual intellectual capital of each employee of the company under consideration since the intellectual capital of an organization is the sum of the intellectual capital of all of its employees. Education is one of the key prerequisites for the intellectualization of labor.

A method to assessing the content and evaluating the intellectual capital of instructors is of relevance since teachers at higher education institutions take part in the training of experts for the resource support of the organization's development. An educational institution's intellectual capital should be viewed as a collection of the intellectual assets of all of its staff members and students. However, based on their primary kind of activity—scientific and pedagogical—a group of scientific and pedagogical workers is regarded as the principal category of staff in measuring the intellectual capital of an educational institution. The characterization of the organization's current and future worth of its intellectual capital should be based on the appraisal of such capital.

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An educational institution's (or any organization's) intellectual capital is evaluated by analyzing the degree of intelligence (i.e., the output of intellectual activity) using metrics that enable it to sustainably increase its competitiveness and progress. A teacher's intellectual capital can be assessed using techniques including self-evaluation, peer assessment, expert assessment, and consumer assessment. [9].

Conclusion

It is suggested to utilize an electronic portfolio as a method for evaluating a teacher's intellectual capacity.

Each teacher now has an electronic portfolio available on the Karaganda Industrial University NP JSC website, which includes information about them such as their basic education, work experience (both academic and non-academic), list of subjects they have taught, employment, professional development, accolades and awards, publications and presentations, and other details. On the teacher's personal webpage on the Internet, all of the electronic portfolio's items are displayed.

In some Russian universities, the following data is included in the electronic portfolio: educational work (distance learning and full-time training); educational and methodological work: scientific activity; organizational and educational work; professional development; training (in master's or doctoral studies); public and other types of work.

As is observed, there are differences in the composition of electronic portfolios. In our university, some types of work are specified in the individual plan of a teacher, such as educational and methodological and public types of work.

The evaluation techniques mentioned previously can be utilized to rate a teacher's intellectual capacity based on the portfolio (self-assessment, peer assessment, etc.).

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Ұйым қызметкерінің зияткерлік капиталын бағалау

Экономикалық дамудың қазіргі заманғы кезеңі маңызды өзгерістермен сипатталады, яғни материалдық емес активтер экономиканың бәсекеге қабілеттілігінің маңызды факторына айналады. Бұл өзгерістер экономикалық ғылым шеңберінде "зияткерлік капитал" сияқты құбылыстың мәні мен бағалау әдістері тұрғысынан зерттеу қажеттілігін өзектендіреді. Бірақ әлі күнге дейін интеллектуалды капиталды түсіну туралы нақты пікір жоқ, әр автордың осы анықтаманы түсінуге өзіндік көзқарасы бар. Мақалада зияткерлік капиталдың мәні мен

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құрылымын анықтаудың әртүрлі тәсілдеріне шолу жасалады, оны бағалау мүмкіндіктері зерттеледі. Қазіргі әлемде білім еңбекті интеллектуализациялаудың негізгі шарттарының бірі ретінде танылады. Осыған байланысты оқытушының зияткерлік капиталының мазмұны сұрақтары мен бағалау және маңыздылығы қамтамасыз етіледі, атап айтқанда: ол не біледі, қазіргі уақытта студенттерге не берді және бере алады (қандай білімдер, игерулер мен дағдылар), оларға болашақ кәсіптік ісі үшін қандай негізгі зияткерлік капиталдар берілді, ал болашақта – кәсіптік жұмыскерлер қандай зияткерлік капиталдарды меңгере алады. Мақалада электрондық портфолио негізінде жоғары білім беру ұйымы оқытушысының зияткерлік капиталын бағалау тәсілі ұсынылған.

Түйінді сөздер: зияткерлік капитал, білім, материалдық емес активтер, адами капитал, әлеуметтік капитал, құрылымдық капитал зияткерлік капиталды бағалау.

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Оценка интеллектуального капитала сотрудника организации

Современный этап экономического развития характеризуется значительными трансформациями, где нематериальные активы становятся важнейшим фактором конкурентоспособности экономики. Данные изменения актуализируют необходимость исследований в рамках экономической науки такого явления, как «интеллектуальный капитал», с точки зрения его сущности и методов оценки. Но до сих пор нет однозначного четкого мнения, что понимать под интеллектуальным капиталом – у каждого автора свой подход к пониманию данной дефиниции. В статье сделан обзор разных подходов к определению сущности и структуры интеллектуального капитала, изучены возможности его оценки. В современном мире образование признается одним из главных условий интеллектуализации труда. В связи с этим приобретают значимость и вопросы содержания и оценки интеллектуального капитала преподавателя, а именно: чем он владеет, что он может и будет (какие знания, умения и навыки) передавать в настоящее время студентам (какие основы интеллектуального капитала для будущей профессиональной деятельности будут в них заложены), а в будущем – каким интеллектуальным капиталом будут владеть профессиональные работники. В статье представлен подход к оценке интеллектуального капитала преподавателя образовательной организации высшего образования на основании электронного портфолио.

Ключевые слова: интеллектуальный капитал, знания, нематериальные активы, человеческий капитал, социальный капитал, структурный капитал оценка интеллектуального капитала.