

INTELLECTUAL CAPITAL AS A DRIVING FORCE OF ECONOMIC DEVELOPMENT

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Abstract

Intellectual capital is a collaboration and mutual learning within and between undertakings which ensures their long-term successful business association. Intellectual capital is an attempt at assigning financial value to knowledge within a particular economic entity. This paper will present ways of measuring intellectual capital, i.e. valorization techniques of intangible assets. The increased interest in the measurement of intangible assets is the result of increasing enterprise value which is not shown in the accounting statements and therefore creates the wrong information. The biggest difference between market and book value is recorded in high-tech enterprises and industries where intensive knowledge is invested in intangible assets such as research and development and brand. Therefore, one of the main challenges for management is creating conditions for successful generation of intangible value (knowledge, services, experience, benefits, speed, quality and reputation) and its transformation into tangible forms (income, profits, value added, stocks, market value).

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1. INTRODUCTION

We live in a time when knowledge is the largest and most powerful capital. In modern companies from 70 to 80 percent of the work is performed by people using the intellect. In the period of the corporation and control by the powerful elite who orchestrate monetary policy, market and all social spheres, the only thing over which they have no control is our brain, which is managed by an individual. The human brain overrides the traditional means of production-raw materials, heavy physical work and capital.

Value is no longer in the tangible elements, since moved to the invisible. Today is therefore a decisive factor in person, by itself, that is, his knowledge. It is a new battlefield for countries, corporations and individuals.

Today the road to riches tiled repeatedly to fill an imaginative use of information, because that information means cash. In a world built on the strength of mind we need to change our definition of education and training. In a world where competitive advantage can be found anywhere, education must be continuous and last for our entire life. Education is the weapon both for the individual and for the company. It must be directed towards the acquisition of practical work and skills required to perform duties in accordance with the profession and occupation.

2. RESEARCH THE BEGINNINGS OF INTELLECTUAL CAPITAL VALORIZATION

The study of legality, conditions and processes of employment or unemployment is extremely complex problem because the category of human potential is dynamic category of each production system.

Also, human capital as an input in the production of a dynamic category that can be different regularities work in different national economies.

However, in all this emphasizes the legality of action: production function, marginal product and the law of diminishing returns, because that principle directly resting on the success of enterprises and national economies.

If we start from the production function representing the relationship between the maximum quantity of product that can be produced with the help of the available inputs on the basis of the achieved level of technology in the given

time, on the one hand, and also: the boundary of the product which is the feed-stock produced quantity of a product, and as a result of one filler unit specific inputs, provided *ceteris paribus*; and the law of diminishing returns, which says that each incremental amount of production caused by the successive increase in one of the inputs finally after a while begin to decline, again provided *ceteris paribus*, on the other hand, you can get to the concept of the marginal revenue for a factor (Pulić, Sundać, 2008.)

2.1 MEASURING OF INTELLECTUAL CAPITAL

The world today is mainly applied 12 methods of measuring intellectual capital of the company. They are also known techniques valorization of intangible assets (Edvinsson, Malone, 1997.)

Relative values - Proponents of this approach are Bob Buckman (Buckman Laboratories) and Leif Edvinsson (Skandia Insurance). The ultimate goal is the improvement of access. Example: to have 80% of employees associated with the client in a significant way.

Balanced goals map - replacement for traditional financial measurements with three additional perspective - customers, internal business processes and learning / growth. They created the professors from Harvard Business School, and is used in Skandia Insurance.

Models of competitiveness' observations and classification of behavior "successful" employee ("a competitive model") and calculating the market value of their output, it is possible to allocate the value of 1 for the intellectual capital that create and use at work.

Systematic performance - Sometimes it is relatively easy to quantify success or progress of one's intellectual capital. For example, Dow Chemical could quantify the growth in license revenue due to better control their patent assets

Crisis period - include the identification of companies that are leading in procurement of intellectual property for their own needs, determining how successfully meet certain criteria and then comparing the results with the company's own achievements leading. An example of the relevant criteria: leading systematically identify gaps in knowledge and use well-defined processes to fill these gaps.

Business Value- This approach focuses on three questions. What would happen if the information that you currently use completely disappeared? What would happen if you doubled the key information that is available? As the value of this information changes daily, weekly, yearly? The evaluation focuses on the cost of the lack of or insufficient use of business opportunities, avoiding or minimizing risk.

Business process inspection- Measures the way that information to enrich the value of the business process, such as accounting, manufacturing, marketing or order.

Knowledge bank - Treats use of capital as an expense (rather than as an asset), a part of the salary (usually 100% of the cost) as an asset, because they create the future cash flow.

Assessment of "brand equity" - methodology that measures the economic impact of "labels" (or other intangible assets) to phenomena such as power pricing, distribution reach, the ability of getting new products as a "supplement lines".

Calculated intangible asset- compares the company's return on assets (Return on Assets) with the published average return on assets for the industry.

Micro-borrowing - new type of borrowing that replaces the non-guarantee (partner support group, training and personal qualities of entrepreneurs) for tangible assets. It is primarily used to stimulate economic development in poor areas.

Colored reports - This method replaces the traditional financial statements (which give black - white picture) with additional information (by adding "color"). Examples of "colors" include the value of the label (brand), measuring customer satisfaction, value-trained workforce.

3. A NEW WAY TO CREATE VALUE AND THE OLD WAY OF MEASURING

The vast majority of companies today is torn between new ways of creating value and the old ways of monitoring operations. The cause of this condition in the opinion of many analysts is the emergence of new business criteria seeking new indicators based on which order to make business decisions.

There are three essential elements that make up this difference in business (Ross, Pike, Fernstrom, 2005):

The first is that there is no more scarcity, and it is precisely in such circumstances for centuries operated an average company. Today's situation is best explained by well known American economist L. Thurow: "Take any conceivable product and let's calculate then around the whole world how much could be produced if all the factories operating at full capacity. Then assess how generous than this world can buy. The result reads 30 % overcapacity, and for some products such as cars, airplanes or computers it is 50 %".

The second is that of changing the structure of work required in the industrial economy dominated by manufacturing, routine work. This applies to both the production and the administrative work. In today's new, information economy is dominated by an entirely different kind of work, and that is intellectual work.

The third is completely changed cost structure. In the classical relationship between the production company and all other expenses was average compared 80:20. In today's enterprise this relationship is almost reversed. Production costs are accounted for the bulk of industrial economics for today's enterprise almost irrelevant, as well as the production itself in the overall activities of the company. The criterion of the company's size was considered (even today is considered) total revenue. However, the modern company is fighting for its market primarily quality and innovation. For modern enterprise core resources are information and knowledge. As for these resources is still no adequate information models. This is why the lack of necessary information on business operations, the Achilles heel of the modern enterprise. There is no doubt that the main task of today's managers in business enterprises to enter knowledge.

The organization of the company must be set so that all individuals have to work a day in acquiring knowledge. Leif Edvinsson of Skandia has three principles for understanding intellectual capital (Edvinsson, 2000.):

1) The value of intellectual property several times greater than the value of the assets shown on the balance sheet carrying. What does it mean when the market price of a company 3-5 times higher than the book value of the company. It is clear that in this company intellectual capital created this new market value of more than book value.

2) Intellectual capital is a material that formed the financial results.

3) Managers must distinguish between two types of intellectual capital: human and structural.

The increased interest in the measurement of intangible assets and intellectual capital is the result of increasing enterprise value which is not shown in the accounting statements and therefore creates the wrong information. The biggest difference between market and book value recorded just high-tech enterprises and industries intensive knowledge which is invested in intangible assets such as research and development and brand. Professor Baruch Lev at the Stern School of Business New York University estimates that American companies today are investing in intangible assets as much invested in machinery and equipment, and that many companies more than 75% of its market value had precisely in intangible assets (Sundać, Švast, 2009). That is why experts in the field of intellectual capital intensive work on developing new methods of measuring intellectual capital that would complement the classic accounts and gave a more realistic picture of the enterprise value. In practice, but there are a number of methods to measure the intangible assets of the company, but none of these methods is not exhaustive.

Karl-Erik Sveiby (2010) divides all known methods of measuring intellectual capital into four categories. Categories represent an extension of the existing classification proposed by Luthyja (1998) and Mc Pherson and Pike (2001):

1. Methods of direct intellectual capital (eng. Direct Intellectual Capital Methods - DIC) - methods estimate the value of intangible assets by placing its various components. Following the finding of these components, they can be directly evaluated as an individual or aggregated coefficient.

2. Methods of market capitalization (eng. Market Capitalization Methods - MCM) - method calculated the difference between the market capitalization of the company and shareholder value as the value of intellectual capital and intangible assets.

3. Methods of return on assets (eng. Return on Assets Methods - ROA) - the average gross earnings of enterprises in a period divided by the average tangible assets of enterprises. The result is ROA companies, which are then compared with the industry average. The difference is multiplied by the average assets of the company to obtain the average annual earnings of intangible prop-

erty. Sharing the above average earnings with average capital costs of companies or interest rate, can be estimated value of intangible assets or intellectual capital of the company.

4. Methods maps of goals (eng. Scorecard Methods - SC) - identify the different components of tangible assets or intellectual capital, and the indicators and indications are created and displayed in a map of goals or to charts. Methods cards goals are similar to the methods of direct intellectual capital, finding that estimates are not available on the monetary value of the intangible asset.

It is noteworthy that none of the methods can fully satisfy all the wishes and needs of companies in the measurement of intangible assets, i.e. the intellectual capital. It is important however to measure intellectual capital, because the only way the company can be familiar with their inner strength, and based on that manage to become a competitive advantage.

4. THE IMPACT OF EDUCATION ON ECONOMIC AND SOCIAL DEVELOPMENT

Today, there is a prevailing awareness that education is an inescapable component of socialization matrix of every society. It may structurally differ from society to society, but is increasingly present intention to equalize the levels of education in the widest possible number of countries to geographical mobility of learners was that freer. Education is mainly assigned a positive contribution to the development of any society, even it is determined at the time the "good society". Education, understood in a broad sense, includes learning and skills, and its purpose is to develop people primarily as individuals. Thus understood, education can be viewed as a potential path to freedom for every individual.

"The education of the actions which affect the adult generation has not sufficiently mature for life in society. Its purpose is that the children excited and develop certain physical, mental and moral qualities required by the society as a whole, but the individual environment to which they belong." (Šundalić, Zmajić, Sudarić, 2013).

According to the conclusion of the OECD "The task of education is to develop a variety of skills which are required by the modern economy, but by doing so it becomes a powerful lever of social selection that will be acting opposite of a stated objective of greater social equality, actually only deepen inequalities".

Education would be in the knowledge society should be the path to equality of opportunity, exiting inequalities created education. Time that education is a step closer to the interpersonal, time in the “alienation of social relations” through the understanding of language equally educated, understanding the needs of equally educated and understanding of diversity differently educated. The result should be a true democratization of social relations that individual open space of freedom of choice, starting with the choice of education, vocational guidance and to build a career. Knowledge society is increasingly being portrayed as a system that consists of the knowledge economy and knowledge workers and symbolic capital ahead of all other capital. An uneducated person in the concept of a knowledge society “outside the system” and it does not count as a productive component.

5. CONCLUSION

Today the main problem of the knowledge economy is its lowest level of development which is called corporate capitalism, based on the ideology of market fundamentalism and neo-liberalism and thus purified of social, democratic and humanitarian values and using the principles of economy of knowledge solely for your benefit, changing the core values of social, economic and political structures causing economic and social crisis in the world. The responsibility is divided between the transition and developed countries, international financial institutions and transnational corporations that have a military, economic and political power and monopoly of technology, communications and cultures and aim to reproduce the capital and increase profits rich transnational elite with the cost of destroying the overall economic, social and natural structures.

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