



Operational Research in Sustainable Development and Civil Engineering - meeting of EURO working group and 15th German-Lithuanian-Polish colloquium (ORS DCE 2015)

The essence of human capital in a building company

- selected aspects

Karolina Jerzak

Construction faculty, Poznan University of Technology, 60-965 Poznan, Poland

Abstract

The role and essence of human capital within the turbulent environment of construction companies on the Polish market is very often underestimated. The construction sector is seen as a field where the main advantage for the management board is the knowledge about the market, about its investors and prices whereas the aspect of human capital is considered as an executory force of assigned projects not as the force which builds competitiveness of the business. Simultaneously many businesses strive to change this approach, in order to gain market advantage and become more competitive for Investors, for example they highlight the role of human capital in the business approach.

The main aim of this article is to present chosen aspects of human capital in an construction enterprise. The starting point for further analysis is the theoretical recognition of human capital, its role and the integral connection with the intellectual capital of an enterprise. Human capital constitutes inborn skills and acquired skills, thanks to which if adequately invested in can be developed and enriched. This places the people in a significant position within the economical definition of business activities in a company.

The second part of the article presents an analysis of the Human Capital Efficiency (HCE) quotient measuring effectiveness based on the VAICTM (Value Added Intellectual Coefficient). Human capital (HC) with regard to the HCE index is connected to all employee expenses (salary and other provisions) however does not constitute intangible assets such as motivation, involvement as well as preventing depreciation and can be calculated as a company expense such as medical insurance. Thus a further analysis will be conducted with regard to:

- Defining the factors in the dynamic scale
- Analyzing the key factors used in human capital management using the dynamic scale

The third part of the article is connected to the results of the conducted analysis on selected large polish construction company. A further analysis for the above mentioned dynamic factors will be connected to medium sized construction companies apart from the current analysis where these factors play an important role with regard to the development of the company.

© 2015 Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the organizing committee of the Operational Research in Sustainable Development and Civil Engineering - meeting of EURO working group and 15th German-Lithuanian-Polish colloquium

Keywords: human capital, intellectual capital, intellectual Co-efficient

1. Introduction

Within the turbulent construction market environment the changes taking place in the economy and in the society have had a direct influence on the amount and quality of highly qualified personnel which enables strengthening of a company's position on the market and sets higher barriers for entering the market for competition.

Currently certain changes are noticeable as far as the approach towards this aspect is concerned and companies are more interested in gaining competitive advantage and becoming more attractive for Investors, companies are starting to represent a more innovative approach as this aspect differentiates them when it comes to competitors and allows an enterprise to attract attention to their company. Thus the role of human capital is how to adapt the work culture to the changing motivational aspects of employees, how to measure human capital in order to be able to create barriers which strengthen the position of companies on the market.

The starting point for further consideration is the theoretical definition of human capital, its role and the indissolubility with the intellectual capital of a company. The definition of human capital is not unambiguous, scientists argue whether the word "capital" is used appropriately, the ambiguity also concerns the scope of the research, i.e. if it is conducted on the scale of one entity, an organization or on a macro scale. In economics the term was first categorized in 1961 by Theodore William Schultz, according to whom human capital constitutes inborn skills and acquired skills, thanks to which if adequately invested in can be developed and enriched [1]. This places the people in a significant position within the economical definition of business activities in a company.

The second part of the article presents an analysis based on measuring the level of effectiveness VAICTM proposed by Ante Pulic [2], based on the analysis of the Human Capital Efficiency (HCE). The HCE is calculated as the Value Added (VA) achieved by one cost unit invested in employees according to the equation:

$$HCE = \frac{VA}{HC} \quad (1)$$

where:

VA – Value Added

HC – Human Capital

The Value Added (VA) constitutes the difference between the income and the expenses of a company and its calculation is based on the theory of stakeholders view [3] and it is distinct from Economic Value Added (EVATM). EVA is the profit that remains after deducting the cost of the capital invested to generate that profit and is defined as Net Operating Profit After Taxes (NOPAT) less a capital charge that reflects a firm's cost of capital [4].

The third part of the thesis is connected to the results of the conducted analysis on the basis of data which has been based on the financial data of Erbud S.A. and Budimex S.A. according to the Stock Exchange.

2. Human capital – the essence

T.W. Schultz proved that the profitability of investing in human capital by education and training in the United States is bigger than that based on physical capital. He devised his concept in 1961 in the following way: "Consider all human abilities to be either innate or acquired. Attributes (...) which are valuable and can be augmented by appropriate investment will be human capital (...). By investing in themselves, people can enlarge the choices available to them"[5]. T.W. Schultz's work takes into account that the distribution of genes responsible for inborn skills is similar in all societies and the differences derive from the acquired skills [6]. Adam Smith in *The Wealth of*

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات