

Alexandra CIOCLOV (PETCU)
Faculty of Economics and Business Administration, West University of Timișoara, Romania
Petru ȘTEFEA
Faculty of Economics and Business Administration, West University of Timișoara, Romania

ACCOUNTING CHALLENGES – CAPITALIZING HUMAN VALUE

Theoretical
article

Keywords

Intangible assets
Intellectual capital
Human capital
Reporting

JEL Classification

J24, J30, M41, M50

Abstract

Assessing the performance of business organisations has been a priority for all stakeholders, and this is the reason accounting has continuously evolved to better assist investors in their decision-making process. However, given the increasing importance of the service industry, the focus in evaluating business performance is also on employees' performance and employee-centred organisational policies that would further stimulate the knowledge-production at the firms' level. As many accounting professionals have already understood, accounting faces the challenge of a continuous adaption to the necessities of the business environment, thus admitting that it should provide the grounds for a sustainable and generalizable methodology for intellectual and, more particularly, human capital recognition.

This paper offers a literature review on intellectual capital management and reporting, leaving room for the debate upon the choice of instruments that would ensure an accurate presentation employees' added-value to organisational performance. It also presents a schematic approach to further develop the subject, describing the proposed methodology for further in-depth research.

Introduction

Accounting has always played an important role in providing stakeholders with the necessary information in order to assist them in the decision-making process with regard to their actions in a specific business situation. For this matter, it is of great importance not only to provide the already expected accounting information, but also accounting should take a step forward in anticipating the informational needs of investors, customers, employees, governments and society in general.

In the context of a continuously developing services economic sector, where organisational performance is mainly, if not entirely, generated by the sum of each individual's knowledge, assessing the performance of a certain business organisation becomes redundant and lacks relevance if not considering the added-value of employees. This could often be translated into the additional performance of a company due to the organisational behaviour of its employees.

However, employees, also known as human resources, can thus be considered "intangible assets" belonging to the employer for the duration of their collaboration, as it is referred to in the labour contract.

This paper presents a brief literature review of the main points of view with regard to intellectual and human capital management and reporting, and sets the ground for a debate upon the usefulness of a so-called "capitalization of human resources", as well as the means and instruments most suitable for the identification, measurement and reporting of human and intellectual capital.

Why should we focus on Intellectual Capital Reporting?

This paper must be viewed in the context of a broader research intended to generate "Contributions to the Methodology of Human Resources Value Quantification as an Asset of Business Organisations", a doctoral thesis progressing at the confluence of two economic areas: accounting and management, using specific elements of them both, aiming at a fair reflection of the actual performance of business organisations.

In the context of the developing tertiary economic sector and given the transition to a new perspective upon employees, we acknowledge an evolution from the concept of "labour" to the one of "human resources", therefore implying that the added value within a business organisation is generated by its employees, through their way of implementing and redefining management strategies. Under these conditions, the assessment of a business organisation's performance requires, an initial evaluation of its potential to generate profits through the resources it has or is likely to attract. Assessing the performance of an economic agent

based mainly/solely on fixed, tangible assets, would be inaccurate, as in the case of most economic organisations their value lies in ideas, patents, knowledge, know-how etc.

In these circumstances, the mission of the proposed thesis is to examine the need for human resources reporting as an accounting asset of business organisations, in order to provide further methodological solutions on the recognition, evaluation, and reporting of human resources in the financial statements prepared by the economic entities. Thus, we believe that a new dimension will be achievable with regard to assessing the actual performance of an economic agent, by treating it as a set of resources (human, material and financial) at the service of obtaining a certain level of profitability.

Research methodology

Regarding evaluation and capitalization of human resources, research over the doctoral studies envisages the survey of the general economic interest on the evaluation of human resources and the proposal of a methodology to quantify the value of human resources as an accounting asset of business organisations based on the results of both literature review and the propensity business organisations' management to assess employee performance.

The scope of the research for the proposed thesis will continue to (1) study the need for human resource capitalization of economic entities, (2) contribute to the development of a methodology for the identification, evaluation and reporting of human resources as an accounting asset, and (3) assess the impact of a potential human resources capitalization upon the measurement of the actual performance of business organisations.

Literature review

Starting from the opinion expressed by Peter Drucker, that the basic functions of a business organisation are marketing and innovation, the others being only costs (Forbes, 2006), we estimate that businesses should capitalize the costs of marketing and innovation, these being the value creators in most companies. But this might be the opinion of a management and/or marketing theorist, not an accounting theorist / practitioner.

However, in 1990, Elie Cohen argued that a proper financial analysis is not limited to calculations of credible indicators, but it must also identify significant financial characteristics of the economic entity for an assessment of its current condition and a prediction of its development. Thus, it provides arguments for broadening the sources of accounting information by non-financial information in order to predict aspects regarding risks and future performance (Bran (Stan), Mrg rit (St nescu), Coman, & Dr gulescu (Ghiță), 2012, p. 532). We

can interpret this as a recognition of the need for expansion of the sources of information used in the financial analysis, given even by theorists in the field. E. Cohen's argument is supported by Ernst & Young's position expressed in the publication "Measures That Matter" (1997), according to which non-financial information have an important role in improving the accuracy of forecasts made in the financial analysis, as they have greater predictive power of future financial performance (The Danish Trade and Industry Development Council, 1997, p. 22).

The general interest for intellectual capital increased in the context of the developing "knowledge economy", becoming a priority of the Organisation for Economic Cooperation and Development (OECD), which led an international symposium on the subject in 1999. The conclusions of this event reflected the need for creating coherent systems of measurement and reporting of intellectual capital by defining indicators finally integrated in the annual financial statements (Holt & Holt, 2010, pp. 167-168).

Prior to the 1999 OECD symposium, The Danish Trade and Industry Development Council Memorandum was elaborated and published, and, after an extensive research that began in 1996, founded the first concrete steps for reporting and management of intellectual capital accounts. Although it is emphasized that the term "intellectual capital accounts" is not an official accounting term, it is estimated that they may constitute a tool for business organisations to demonstrate strategic focus on the long term by actions taken in the current activity, that is especially relevant for companies mainly based on knowledge, where staff competence is the most important resource (The Danish Trade and Industry Development Council, 1997, p. 5).

Later, in 2001, with the concern of many institutions (mainly Scandinavian, since they have a longer history in intellectual capital research) and funding from the European Union, the MERITUM project (acronym for "Measuring intangibles To Understand and Improve Innovation Management") was implemented. The final report of the project ("Guidelines for Managing and Reporting on Intangibles (Intellectual Capital Report)") distinguishes between addressing intangible assets through a static approach and a dynamic one, as summarized in Table 1.

Analysing the most cited works with regard to intellectual capital, we observed that all proposed intellectual capital structures emphasize the importance of the human factor in generating added value and organisational knowledge (Schultz, 1961) (Galbraith, 1969) (Roos & Roos, 1997) (Nahapiet & Ghoshal, 1998) (The Chartered Institute of Management Accountants (CIMA), 2003) (Youndt, Subramaniam, & Snell, 2004)

(Huang & Wu, 2010) (AccountingWeb, 2010) (Giju, Radu, Grigore (Iancu), & Vlăda (Vlad), 2012) (Brătianu & Orzea, 2013).

The human factor, human resource or human capital is the source of research and development at the organisational level as a result of attitudes towards work and the knowledge, skills and competencies of individual employees. But the development of employee productivity is a result of a partnership between the individual and the organisation in which each of the two parties must offer the framework for an open collaboration that motivates and facilitates the transfer of knowledge from the individual to the organisation, as well as from an individual to another within the same organisation, for the mutual benefit of those involved. Precisely for this reason, Peter Drucker stated that major investments are necessary with regard to the training tools, training and education of employees, so that they can manifest the attributes of creativity, intelligence and competence, leading to the development of new ideas and therefore the success of the business organisation (Huang & Wu, 2010, pp. 7-8).

Different models of intellectual capital place human resources in the centre of all the elements that constitute the intellectual resources of a business organisation. We can therefore understand that the entire system of intellectual capital management of a business organisation depends on the human resource (through its knowledge, skills and attitudes), whose main characteristics are the uniqueness, value and inimitability, i.e. the difficulty of its substitutability (Rexhepi, Ibrahim, & Veseli, 2013, p. 49).

Amid this, it becomes interesting to study the matter of the control that the organisation has upon its human resource: is the company in control of its competitive advantage source or is the employee the one to decide what is period of time for which he/ she will provide the company with his/ her knowledge (Roos & Roos, 1997, p. 3)? We strive to answer this question in the following chapter of this paper.

Arguments in favour or against capitalising human resources' value

A managerial approach

As we can conclude from the previously stated, it is mainly management that favours the recognition of human resources as assets of business organisations, expecting the accountants to come up with a solution for the implementation of such innovation in terms of financial reporting.

But why is management so concerned with intellectual capital reporting and what are the expectations of companies on its benefits?

According to the answers provided by the ten companies surveyed by the Danish Trade and Industry Development Council, the main

motivation for their reporting on intellectual capital refers to improving stakeholders' perception on the considered business organisation. By improving perception respondents expect, for example, creating a good employer reputation for attracting new employees and retaining present well-trained and motivated employees, increasing investor confidence in the corporate profitability, as well as strengthening relationships with current customers and attract new customers by the attention paid to the total quality of the processes (The Danish Trade and Industry Development Council, 1997, pp. 16-17, 25-26, 77).

Other arguments provided by management in favour of human resources recognition as accounting asset are stated below: (1) The recognition of human resources as an accounting asset ensures sustainability and consistency of human resource management policies and long-term management strategies; (2) From a psychological and sociological point of view, the business organisation is the environment for educational and professional development of human resources, which is why employers simultaneously benefit from rights and obligations in relation to their staff; (3) Closely correlated to the previous point, the level of performance achieved by the employee in support of the business organisation is conditioned not only by heredity (natural / original endowment of the employee), but also by the professional education acquired within the structure of the employer (stimulating / limiting initial endowment); (4) Similarly to any other process of capitalization of an asset, business organisations report human resource costs, whereas part of these are aimed at increasing the value of the employee in the benefit of the company. These costs are those that may be indirectly subject to capitalization, capitalizing at least the added value of the employee, as a result of the considered investments.

An accounting approach

In reply to the expectations of business organisations' management with regard to the capitalization of human resources' value, the accountants' point of view suggests a more sceptical approach, based on the following general arguments: (1) There is a very high degree of subjectivity with regard to the assessment of the performance of an employee, when we refer to comparing the actual results with the expected ones; (2) Staff is not a controllable resource of the organisation, as they can express their own will with regard to the duration of the employment contract, therefore human resources do not meet the requirements for recognition as an accounting asset.

In order to provide a more detailed presentation of the accounting approach, we will describe

hereinafter the main criteria for an intangible asset recognition, analysing the extent to which the human resources can be considered assets of business entities.

Based on the definition of accounting assets, we can reveal that the main criteria for recognising an accounting asset consist of (IAS38 - Intangible Assets, 2014): (1) Being an identifiable resource - assessed through: (a) Separability - the ability of a good to be distinguished, separated from other similar goods and sold, transferred, licensed, rented or exchanged, either individually or within the framework of an associated contract, or (b) Its origin residing from contractual or other legal rights, regardless of the transferable or separable nature of these rights; (2) Existence of economic entity's control over the asset in question - meaning that the entity has the legal right to benefit from the use of such resources; (3) Probability of generating future economic benefits - criterion that considers the existence of future economic benefits in the service of the business organisation, as a result of the use of ownership / use of analysed resources.

Along with the three criteria mentioned above, for the recognition of an asset shall be also taken into account: (4) The credibility of the cost assessment for the considered resource.

Since the purpose of the work is to create / contribute to the methodology for quantifying human resources as an accounting asset of business organisations, the first step is to check whether employees of economic entities meet the criteria for recognition as an intangible asset.

Thus, we believe that (1) human resources are identifiable - as there is a contractual relationship (e.g. employment contract, etc.) which states that the employee provides the employer with their ability to work required for the job that is the subject of their collaboration. The employee offers the employer the labour force, be it physical or intellectual, depending on the specific position, labour force that is separable from the work of other employees (being possible to assess individual performance). (2) There is a certain level of control that the respective organisation has upon the employee, expressed through performance indicators that the employee must perform in accordance with his employment contract and job description. This form of control of the employer over the employee can be done continuously or intermittently, throughout the duration of their collaboration, which is equivalent to the notion of "useful life" of the already recognised assets. (3) Using the employee's working capacity, the employer expects future economic benefits, i.e. the generation of revenue from the sale of goods or services to which the employee contributes through its participation in the production process. The ratio between future economic benefit and work performed by the employee is determined, for

example, by reporting turnover to the employee payroll costs for the considered period. (4) It is possible to credibly assess the total cost with an employee, based on the amount specified in the employment contract and addenda thereto (if any) as representing the remuneration of the employee's work (i.e. gross salary). To that amount (net salary received by the employee encompassing, its contributions to social security, health, etc. and pay income tax) one must add the taxes paid by the employer for the respective employee, thus summing total employee costs.

As apparent from the above, there is motivation to believe that human resources can be assimilated to intangible business organisations assets as they meet the criteria for identifying and recognizing intangible resources as defined by IAS38.

However, we believe that the debate on this subject is just getting started, as it requires finding answers to related questions such as: (1) Is there sufficient specificity and measurability in the way of defining performance indicators to consider that employees' work can be measured reliably? (2) What insurance does an economic agent have with regard to the actual duration of "useful life" of an employee within the considered organisation (e.g. considering that the employee may require early termination of an employment contract, even under a fixed term of it)? (3) Which employees of business entities should be considered intangible assets: all employees or only those directly involved in the production process? (4) How to determine the total cost of an employee? Does it suffice to consider the total cost of payroll or should there be incorporated other expenses incurred by the employee's activity within the business organisation? (5) What does the potential capitalization of human resources mean: does it cover the entire performance of an employee or just the activity generating added value through individual research and development?

Conclusions

Welcoming the concern regarding the identification, evaluation and reporting of human capital, we believe that in order to separate what should be recognised as human capital asset it is important to take into account a set of both financial and non-financial indicators.

Based on the current status of our research, we consider that not all human resources should be capitalised, but only those that have a more significant performance in research & development. Even with this segmentation in mind, it is eventually needed a more clear perception on the means of control the company has on the R&D productive employees, in order to prevent a high level of employee turnover and motivate the productive and creative employees to continue their activity in the scope of the respective business unit.

For further research, we intend to pursue the directions as given below: (1) Quantitative research - collecting and interpreting data on SE European companies' interest to assess the performance of human resources and on their perception on the investments versus the expenses associated to human resources. (2) Qualitative research - semi-structured interviews with representatives of large companies (CEOs, CFOs, HR Managers) to assess their interest on the identification, evaluation and reporting of their HR value and to assess the impact of human resources performance on the overall business organisations' performance. (3) Proposing a model to quantify human resources as an accounting asset of business organisations, model that would eventually be subject to validation of accounting professionals (through interviews with them).

Acknowledgment

This work was cofinanced from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/159/1.5/S/134197 „Performance and excellence in doctoral and postdoctoral research in Romanian economics science domain”.

References

- [1] AccountingWeb. (2010, 04 27). *Financial Reporting*. Retrieved 06 20, 2013, from <http://www.accountingweb.co.uk/topic/financial-reporting/financial-reporting-ill-equipped-deal-intellectual-capital/422203>
- [2] Bran (Stan), N.-C., Mrg rit (St nescu), S.-G., Coman, D. M., & Dr gulescu (Ghiță), R. (2012). Accounting and extra-accounting information - valences in meeting the financial analysis. *Procedia - Social and Behavioral Sciences*(62), 531-535.
- [3] Br tianu, C., & Orzea, I. (2013). The entropic intellectual capital model. *Knowledge Management Research & Practice*(11), 133-141.
- [4] Forbes. (2006). Retrieved 07 05, 2014, from http://www.forbes.com/2006/06/30/jack-trout-on-marketing-cx_jt_0703drucker.html
- [5] Gîju, G. C., Radu, V., Grigore (Iancu), A. M., & Vl daia (Vlad), M. L. (2012). From visible to hidden intangible assets. *Procedia - Social and Behavioral Sciences*(62), 682-688.
- [6] Holt, G., & Holt, A. (2010). Intellectual Capital - Hidden Fortune Not Reflected In Financial Statements. *Analele Universit ții „Constantin Brâncu i” din Târgu Jiu, Seria Economie*(3).
- [7] Huang, Y.-C., & Wu, Y.-C. J. (2010). Intellectual Capital and Knowledge Productivity: The Taiwan Biotech Industry. *Management Decision*, 48(4), 580-599.

- [8] MERITUMProject. (2001, 04 30). Retrieved from http://www.pnbukh.com/files/pdf_filer/MERITUM_Guidelines.pdf
- [9] Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital and the Organizational Advantage. *Academy of Management Review*, 23(2), 242-266.
- [10] Rexhepi, G., Ibraimi, S., & Veseli, N. (2013). Role of intellectual capital in creating enterprise strategy. *Procedia - Social and Behavioral Sciences*(75), 44-51.
- [11] Roos, G., & Roos, J. (1997). Measuring your Company's Intellectual Performace. *Long Range Planning*, 30(3), 413-426.
- [12] Schultz, T. (1961). Investment in Human Capital. *The American Economic Review*, 51(1), 1-17.
- [13] The Chartered Institute of Management Accountants (CIMA). (2003). *Understanding corporate value: managing and reporting intellectual capital*. Retrieved from Cimaglobal: http://www.cimaglobal.com/Documents/ImportedDocuments/tech_techrep_understanding_corporate_value_2003.pdf
- [14] The Danish Trade and Industry Development Council. (1997). *Intellectual Capital Accounts - Reporting and Managing Intellectual Capital (Memorandum)*.
- [15] Youndt, M., Subramaniam, M., & Snell, S. (2004). Intellectual Capital Profiles: An Examination of Investments and Returns. *Journal of Management Studies*, 41(2), 335-361.

Biographical sketch

Alexandra Cioclov (Petcu) is a Ph.D. student in the field of Accounting, with a professional background mainly in European funded projects aimed at enhancing students' employability. This justifies her interest in developing human resources and in the research focused on the capitalization of human resources as organizational asset.
E-mail: alexandra.cioclov@gmail.com

Prof. Petru tefea, Ph.D. in the field of Accounting, Faculty of Economics and Business Administration, West University of Timi oara, is also Vice-Rector for Financial Strategy and Management at the West University of Timi oara. Prof. tefea's research interests are mainly focused on financial analysis, structural funds, investment financing and investment efficiency.
E-mail: petru.stefea@e-uvt.ro

Tables

Table 1
Intangible assets in a static and dynamic approach

Static vision	Intangible resources		
	Assets	Competences/ Abilities	
Dynamic vision	Intangible Activities		
	Developing or acquiring new intangible resources	Increasing the value of available intangible resources	Evaluation and monitoring intangible activities

Source: (MERITUMProject, 2001, p. 12)

