# HUMAN RESOURCE MEASUREMENT: A NEW CHALLENGE FOR ACCOUNTANTS

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#### Abstract:

The recent and the nowadays evolution, typical to the new economy, has emphasized certain weaknesses of the financial book-keeping, uncapable to outline these immaterial actives which determine large differences between the tranzaction stock market value and the book-keeping one. More or less identified with the human actives or with the human capital, these notable differences which surpass the company's material actives, were the study object of numerous researches in the USA and the western european countries. The majority of specialists involved proposed to eachother to quantify these human actives and to transpose them in the book-keeping balance sheet or in other instruments which can ease the decisional process concerning the human resources of the company. The work in hand is an inventory and it points out the main evolutions of this research, emphasizing the elements which bring important contributions in the quantification of the human factor and it's potential in the company.

Key words: human capital, costs, scorecard, balance sheet

JEL classification: M41

### I. Introduction

In the modern world it is more and more debated that the growing difference between the book-keeping value of a society and it's transaction value or stock market represents the intellectual value of the capital accumulated. The stock market capitalization can be two or three times or even larger than society's book-keeping value. Preoccupations for a formal quantification of the human capital began in USA, in the 1960s, when a research current proposed to include it in the book-keeping balance sheet, but they had no practical consequence. The quantification problem of the active people has drawn the attention of many specialists, especially after the 1990s, when immaterial elements from within organisations have registered visible growth. If the book-keeping attempts had no success until now, the evaluation of the human capital continued on the costs/advantages relationship, with the construction of the strategic board and other interesting forms.

## II. The human actives and the book-keeping balance sheet

Initially, the human actives book-keeping had as an objective the bookmarking of their values in the book-keeping balance sheet. As a result after the exerted pressure concerning the improvement of the informational system in the investers direction, but also for the support of the internal decision, the current innitialized in USA had as a main idea the formal reconnaissance of the importance of the human factor in the patrimonial value of companies, by including the human resources in the active balance sheet.

The attempts which aimed the book-keeping of the human actives determined the emergence of two theoreticall currents:

a) the human capital theory, promotes the initiative of economists Schultz(1961) and Becker (1964); the human factor is considered an active which has a currency value for the ability, knowledge and its experience ensemble; as any capital, it must be the object of several investements and maintenance costs, which determine the emergence of advantages to the company where the activity is conducted;

b) the human relationship school, brought to life by Rensis Lickert, for which the evaluation of performances methods, established exclusively on criteria which aim the short-term profit, can determine the emergence of new administration methods susceptible to alter the human relationships, and finally to be unfavorable for the long-term profit.

The first book-keeping methods of human resources were meant to evaluate costs, as well as the value of this important production factor, underlining, this way, the surplus of profit which these add to the company where their work is implemented.

The method of historical costs, initially developed by Brummet, Framholtz and Pyle(1968), acknowledged and registered those costs with the staff who had connections with the investements, such as recruitment, selection, integration, training, familiarizing, promotion and adaptation problems at one's work place. These actives generate productive effects, which justify comprisal in the investement of human resources recruitment. On the condition that they could be conveniently pointed out and attached to a book-keeping exercise, these costs must be dampened on the useful life time of the human active. The duration is calculated depending on a series of probabilities, such as life duration of individuals, their health, retirement age, the settling day of the work contract etc.

The method of cost replacement was presented by Framholtz (1973), as an alternative or a possible add-on to the latter method. Based on the bringing up-to-date of historical costs principle, the method has as an objective the registration of expenses which can be set to identically reconfigure the human potential which is at a companies disposal at one time or another.

The method of cost opportunity. The cost opportunity is defined as being the value of human resources in its most favorable alternative usage. The representants of this method, Heximian and Jones (1967), suggested a competitor auction system within the company, where those responsable with the divisions are meant to "buy staff". In the whole, the auction has to permit the establishment of a balanced situation which represents the "price" of a group of people, assimilated by the economical value incorporated in the company's active.

The measuring of the human resources value had more attempts, initially all in currency, but some models integrated economical and behaviour variables as well.

In 1963, Hermanson suggests two measuring techniques:

- the "goodwill" latent method (hidden), which takes into consideration a prediction of future profits and assigns to human resources any exceedance of normal profits foreseen in a certain sector;
- the method of bringing up-to-date the value of the future salary tide, balanced with a factor which measures the relative efficacy of human resources of a company.

The models which combine a non-monetary, behavioural quantification with a monetary one, supporting itself on the works of Lickert(1976). In 1985, Framholtz emerges a model of the value brought up-to-date of the future services or, putting it in another manner, the value of human resources is represented through the stream of earnings brought to the company by the staff.

The first book-keeping attempts of the human actives, published in financial situations, remained limited concerning their spreading. The R.G.Barry Corporation society applied in 1966 the method of historical costs, but did not insisted only in a few

years in practicing it. The places in which these attempts were implemented were diverse, but limited to organisations or parts of these in which the grey cells, ability and professional knowledge are determined in obtaining the product or the service provided for the market.

The book-keeping and financial magazines from the USA and western countries spread until the 1980s these new ideas, but their propagation by management magazines of human resources was slow and limited, marking the specialists' scepticism in the possibility of using the results of such papers. All models which appeared were subjected to diverse criticism, such as:

- the normal nature of "human active" raises the problem of its identification an immobilization title; or the book-keeping model with a dominant patrimonial can't easily pass from sight because on an active such as this the company is not the owner;
- the diverse methods of evaluation proposals meet great difficulties at reckoning, which remains exposed to subjective estimations;
- the notion of value is tackled only in terms of costs for companies or of earnings for individuals, but not for advantages for the company; the economical value of human resources refers more to their capabilities and abilities, and not at costs;
- the high complexity rank and the application cost in practise of these models suggests a break in their normal usage;
- the scientific validity of models was considered uncertain, because of some concepts which are considered unclear, imprecise;
- research was based on the hypothesis of simple additiveness and remained centered on the intrinsic value of individuals, ignoring the collective and administrational context of work, but also the synergic effects of their cooperation.

Therefore, the approach which favoured the research concerning the measuring of the human capital has imposed as a susceptible approach to attract a minimum of consensual thematic and practical bases. Also, the book-keeping standardizations at a national and international level did not take into consideration the preoccupations concerning the human active book-keeping.

### III. Management and cost control

The importance given to the evaluation of the human capital has blurred in the 1980, when researches concentrated on "the human cost". The organisations' interest was to reduce costs and find new sources of productivity, to have a better understanding of the effects of continuous training. All in all, their management was aiming the cost-advantages analysis, which could permit the support needed for the decisions taken in the human resources domain and take into consideration the hidden costs of this kind of measures.

Based on the cost of opportunity methodology, the works of Lajoinie(1980) and Martory(1980) develops this issue un terms of cost/advantages, initially aiming to study the susceptible economic advantages and compensate for costs of improving the work conditions, and then of the accidents, of strikes or of a managerial decision.H Savall(1979) developed the "costs/hidden performance" concept, with the purpose of evaluating the disfunctional administration of costs or the advantages of a social improvement measure, such as staff rotation, the quality of products etc.

Spencer(1986) and Cascio(1987), from the USA, were preoccupied with the behavioural costs in work and the costs and advantages of selection procedures, of training procedures and employee assistance. Companies like Ericsson and Telia have elaborated, in Sweden, reckoning methods which allow the evaluation of the cost of sick leaves and staff rotation.

The methods of decisional support were destined to ease taking internal decisions within the organisation and proceed from administration or internal control book-keeping, in a perspective of social immobilization strategies of the human resources. Most often they are used within the control of social administration and social hearing methodology, in domains such as:

- the politics of the work place(in a recession period it is better to license or preserve staff, to avoid eventual replacement costs);
- recruitment and human resources moulding politics(it is preferable to train the existing staff in order to accomplish new tasks, or to recruit staff already experienced, but costly it is therefore better to recruit an already trained staff, or to recruit at a lower level and to ensure its training from the inside);
- the administration of time spent at work(fixing a selection model of substituting the temporary employment with a permanent one in the case of season activities);
- the evaluation of the efficiency of one's investement in a training programme.

These methods of book-keeping brought along an additional clarifier within the investments politics, by integrating the social costs in criteria and selection reckonings of investments, by taking into consideration the human conditions used in the exam of different equiping possibilities. The emergence of new administration control instruments in the administration of employees brings closer this domain of administration to human resources.

# IV. The appearance of scorecards

Piloting and controlling the immaterial potentials of a company has become an urgent necessity in the last decade of the 20th century. Because the traditional book-keeping model is insufficient in rendering the reality of immaterial elements, new approaches have emerged which aim to establish connections between operational performances and the company's strategy. The works of Kaplan and Norton(1999), through which the balanced scorecard is promoted, permitted a better understanding of this approach, which is being experimented for more than ten years now.

Associating the strategic indicators and the result indicators, this model of scorecard presents the characteristic which approaches the company's strategy after four axes: clients,process and innovation, practical administration and practical finance. The "practical administration" axis is largely based on human capital, intercepted through the employees' potential, motivation and their responsability, but it is not picked up as a supporting element of the capitalization of the innovation process and the clientel satisfaction.

The developing of reflections over the managements capacities has led to several questions over the value of the intelectual capital of the company. Petrash(1996), manager of the intelectual actives and manager of the capital administration at Dow Chemical, emerges the most simple formula to reckon the intelectual capital:

The stock capitalization - the book-keeping value=value of the intelectual capital. At the swedish company Skandia, the intellectual capital includes:

- the human capital(which exist in the head of employees);
- the structural capital or the organizational one(what remains in the company when employees leave at night), which is also composed out of the clientel and relationships capital, of processes and the capital of renewal and development.

Skandia developed a new type of strategic scorecard which highlights the human resources of the company, but it's generalization lasted for three years. It's purpose is that to emphasize the riches hidden by Skandia. The human capital is defined as being a

combination between the employees knowledge, their talent, their innovation spirit and each and everyone's capacity to fulfill their tasks. The definition includes, as well as, societies values, culture and it's philosophy.

Destined to replace the traditional budget, the scorecard of the "immaterial capital" is presented as a mobilization instrument of the human resources, as well as an evaluation one. Concentrating on five domains of the success key factors (finance, clients, process, renewal and human development), the managers identify the key indicators of measuring the performance.

#### V. Conclusions

The problem of book-keeping the human actives was born out of the preoccupation and interest of scientists in book-keeping which, for twenty years, focused on the evaluation in monetary terms, with the ambition of integrating the human investment in the book-keeping balance sheets. The results were not the ones anticipated. The book-keeping model is today interpellated to his capacity of not responding to a higher capitalization demand of the actives accepted by the ones who settle the book-keeping.

When the human element is intercepted in cost terms or in a perspective of evaluation of risks and performances, it's integrity in the book-keeping administration seems simple and pertinent. The devices nowadays have the tendancy to detach from the exclusive financial evaluations, providing the opportunity for the human actives to be presented under a quantitative unmonetary form or even under a qualitative one, emerging the strict book-keeping, in monetary terms.

The strategic scorecards can provide, at the same time, capitalization elements for the third party/person and set up the support in the internal decision, incorporating this "active" so difficult to evaluate.

The followers of the immaterial capital evaluation are conscious that the purpose of suplying an objective measure is not as indispensable as the advancement of knowldege in the importancy of the human factor in development and the organizations' perenniality and the administration of it's behaviour in the direction of the great administrational purposes.

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