

HOW TO MEASURE RETURN ON INVESTMENT INTO HUMAN CAPITAL DEVELOPMENT

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Abstract: *This article focuses on approaches to measuring return on investment in the field of human capital development and formulating economic effectiveness of realized projects of human capital development. The overall framework for the presented ideas is formed by Balanced Scorecard and the topic of intellectual capital in relation to creating market value of a firm. Ideas presented in this article contrast some theoretical approaches with actual situation in several organizations. The aim of this article is to underline the need to measure return on investment into human capital development and to indicate how to deal with certain difficulties in this process. The starting point of the article is represented by author's previous works in theoretical fields, research and their interconnection with current business practice.*

Keywords: *human capital development, return on investment, market value of the company, intellectual capital*

Introduction

Current time has brought a lot of new and so called intelligent products which are connected with new technologies and which change different aspects of lives of individuals as well as companies significantly. Thus creating a value for customers has been changing its form, it is more tightly bound with specific knowledge and abilities of people which need to be developed, which are harder to evaluate and more over they do not always have really direct and clear impacts on financial results of business.

Investment into technologies are more visible and more easily measurable than investment into people, which, however, have higher potential benefits. To enable people to contribute to increasing the market value of a company they work for successfully, they must get to a required level in their personal and professional development using efficient development programs. Management reasonably requires information on return on used investment into programs related to the work with human resources. Such a pressure to measure return on investment into human resources comes not only from proprietors, top management, but such a requirement comes directly or indirectly from other management approaches

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applied in the company. E.g. BSC (Balanced Scorecard), TQM (Total Quality Management), BPI (Business Process Improvement), or intentions to increase a company market value are concerned, and they result in an increased interest in measurement and assessment of efficiency of all kinds of investments in a company.

The fact that there is a necessity to measure return on investment into development of human capital is nothing new, however, the problems arise at an effort to use known methods used at investment into tangible assets. It seems that it is necessary to solve a way of expressing the benefits of development programs first of all (there is a designed model in the article). The article aims to show what a process at solving the issues connected with a process of measurement of such investments may be like. All the issue has been set into a wider framework of a company strategic management besides the designing the model.

The author's scientific research in the area of human capital and a tight interconnection with a company practice are the sources which the author used.

1. Situation

The speed of technological development is getting higher permanently, it is getting more intensive and virtually all technologies develop in an amazing tempo. We realize a shift of production from developed countries to less developed ones or to the countries with lower costs at a global level. In fact everything can be manufactured or produced elsewhere cheaper.

What else do we want to compete with against cheap manufacturing if not with orientation on people, their invention, creativity, conceptual thinking ability and ability to cooperate, social interactions and emotional intelligence, thus with **intellectual capital**. Only creative, educated, enthusiastic and self-driven people are able to compete, by making products with a high customer value.

Paradoxically the globalization moves not only technologies which destroy some industries but also **brain work** eastwards or somewhere else overseas and this forces us to search for a different approach which will bring value and which will not be able to be copied so easily at the same time. It involves ability to combine sometimes seemingly inconsistent ideas into something new, to empathize with others better and to understand slight differences in interpersonal relationships, to wake joy at people up and to overcome borders of a common day-to-day life. If we want to direct people into the above mentioned areas, to develop their potential, it will spend a lot

of time, effort and financial sources. It is a matter of course that such investments must be **economically efficient**.

A **regional survey** (a questionnaire event, interviews with management) from March to October 2009 was carried out under the guidance of the author of the article which dealt with revealing the level of talent management in central Slovakia. Forty organizations took part in the survey. The aim was to reveal the level of persistence and utilization of talent management and to make a starting point for further works in the area of human capital. Organizations included in this research came from the industries of production, finances, public sector, IT and services².

In the context of the submitted article the partial result showing where the surveyed organizations invest the most is interesting. The answers differ depending on the type of industry since the character of business affects the amount of investments into particular areas. Production companies invest into production the most in all cases except one. Priority answer of the companies providing services differ, emphasis on development of people is higher. However, the problems with assessment remain.

The result of the general evaluation shows that people (45 %) and production (30 %) are the most invested areas. Such a result is pleasant but on the other hand it is necessary to realize that managers understand investment into people in a very wide range. For example investments into development ordered by law at specific occupations are not so important for our evaluation. Information technologies (39%) were number two priority in used investments and then people again (33%). The third option in the investment sequence were different areas chosen by people, however, the most marketing (50%) and logistics (29%).

Most companies who participated in the research do not have a parent company or if they do, they do not influence them in the area of development of people. All the process of development is on consideration and abilities of local managers, of course while fulfilment of business financial criteria.

It has been proven in discussions with the managers that the amount of investments is significantly affected by the fact that the managers do not know suitable methods of how to approach to measurement of return on funds invested into development of employees, which is a subject-matter of the article.

² VODÁK, J. Talent Management in selected Slovak Enterprises, Acta Academica Karviniensia 1/2009, OPF Karviná, Czech republic

It is becoming a paradox of the information society that computers are able to do complicated mathematical calculations but creativity remains a domain of people and their brains. Some countries have realized this problem and they build their economic models on educated and creative people. We can see that in the examples of geographically not very distant northern countries, Finland and the company Nokia are well-known. An idea of brain-drain is frequently used as an argument **against investment into human capital**. However, examples from practice show that it is necessary to take care about satisfaction of the people, to help them achieve happiness and then they will have no reason to look for their happiness anywhere else. There will never be enough of capable people, a fight for skilled and talented ones has already started in more developed countries and it starts getting more intensive.

From the long-term point of view if we look at survival of a company through the prism of human capital, several important elements occur. First of all it is a culture which is oriented on performance and performance management approach. Then they are low fluctuation of employees particularly regarding to the key groups of employees, high level of employee satisfaction, and readiness of a group of qualified personnel reserves, efficiently set remuneration system, investments into human capital development and using the company system of competences at selection and performance assessment of employees.

2. Strategic context of investment into human capital

The topic of measurement of return on investment into human capital is so important that I consider necessary to emphasize its importance within a strategic framework which points out its importance and connections with other activities in a company.

2.1 Balanced Scorecard

Balanced Scorecard (BSC) is a systematic approach to manage limited sources built on a set of managed activities which will ensure achieving the objectives required by different interest groups. The basis idea is that the purpose of efficient management is to create and provide value for particular interest groups better than the competition. It is a **strategic framework of management of performance**. BSC arose as a reaction to insufficient approaches to measurement of company performance which were tributary to industrial era but which are not sufficient in today's information society. It has pointed at the importance of intangible assets for creation of value of particular interest group significantly. Human resources managers have been thus given a tool which orientates management towards clear understanding

of the importance of **intangible assets** for a company and a need of systematic development of human capital.

Balanced Scorecard, which is considered a strategic system of management and measurement of company performance today, consists of four perspectives – financial, customer, internal processes, learning and growth. The perspective of learning and growth is particularly important for this article.

Causality hidden in this methodology is an important element.³Intangible assets of the company are its base. Cause-and-effect relations presented in BSC say, briefly said, that if the company increases quality of human capital, it is probable that such people will be able to improve internal processes and if they are able to improve internal processes, the company will provide a higher value for customers which will then be reflected in financial indicators of the company and bring value to particular interest groups.

2.1.1 BSC – Perspective of Learning and Growth

Objectives of the **learning and growth** perspective create an infrastructure which enables the objectives of other BSC perspectives and in the final effect required strategic objectives and a vision to be achieved. Focus on a company infrastructure – the people, systems and procedures - is important in this perspective if the company wants to achieve long-term financial goals. In other words, focus on **intangible assets** and their development is concerned.

Current time period and information of society requires a high level of qualification, mobilization of potential and abilities of employees to achieve the company goals. The company must permanently improve their performance if they want to, at least, maintain their ability to compete. However, if they want to rise beyond the borders of current financial and customer performance, observing the standard operation procedures implemented in the past will not be enough. Therefore the ideas on how to improve the processes and performance regarding to customers must come from the first line employees the most, who are the closest ones to both the internal processes and customers.

A lot of companies use the objectives for their employees divided into three groups of output indicators. They are usually the following ones:

- productivity of employees,
- employee satisfaction,
- keeping the employees.

³ KAPLAN, R. S.& NORTON, D.P.: The Balanced Scorecard. HBS Press, Boston

The productivity of employees is the most discussed one in the companies and the ways how to increase it are looked for, mostly through improvement of the internal processes. However, relatively little is spoken about satisfaction of employees, its connection with company goals and its improvement. Only a few more advanced companies have looked into this issue.

Regarding to **keeping the employees** interesting for the company from the long-term point of view – they are the employees with high potential, profitable for company business. Each unwanted leaving means a loss of intellectual capital. Permanent employees are bearers of company values, operation processes know-how and sensitivity to customers' needs.

Productivity of an employee is an output indicator of aggregated influence of increase in abilities and working ethics of employees, innovations, improvement of internal processes and satisfying the customers. Identifying the links between the output produced by the employees and a number of employees used for that should be an objective. Productivity is measured by different ways, e.g. a profit per an employee, added value, production, receipts or turnover per an employee. However, it is necessary to add other indicators to productivity at searching for suitable key indicators (KPI Key Performance Indicators) which will be able to predict future condition (future ones), not only to show what has been (lagged ones). Satisfaction of an employee is one of the suitable ones, however, that means a wider term.

A need of **employee satisfaction** arises from the fact that working ethics and general satisfaction with a job are considered important today. The thing is that correlation between satisfaction of an employee and satisfaction of a customer and their contribution to a company has been revealed by the research. Satisfaction of employees is thus becoming an essential condition of increasing productivity, responsibility, improving quality and customer service gradually.

If the employees and teams understand the company, its vision and direction better, they will be more motivated, satisfied, and open to changes and understanding at implementation of important decisions. The company will improve, it will be more sensitive to its surrounding and it will develop its competences continuously and thus increase its chances to succeed.

2.2. Process of creating a company market value

If we understand BSC as a strategic framework of management and creating a value for interest groups, it is good to have a look at expressing

and creating the company market value also from a bit different point of view, which indeed also accents the elements of intangible assets.

Current tendencies emphasize long-term sustainability and efficiency of business, keeping the key employees, maximum utilization of their knowledge, innovation abilities, growth of a make value, growth of basic assets and **development of abilities** of the employees, with cooperation and creation of networks of companies⁴. In the future the companies which will utilize the ability to search for and to **develop human capital** necessary to get a competitive advantage will gain ground.

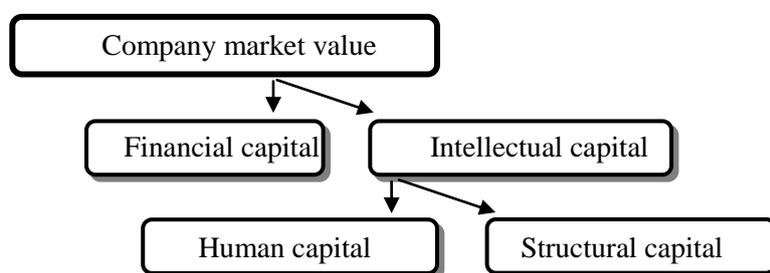


Figure 1. Process of creating a company market value (adjusted)

Improving a market position of a company is a process requiring both time and intellect. Figure No. 1 shows linkage of creating a company market value originating in the model of the company Skandia⁵ in relation to particular kinds of capital (shortened). Total **company value** is formed by financial and intellectual capital. Financial capital is made of financial assets in a form of funds or securities. I am not going to discuss financial capital in the article.

Intellectual capital means organized knowledge which is used in creating wealth of the company. It is represented e.g. by patents and protected technologies. It is an ability to transform knowledge and intangible assets into sources of wealth. *M. A. Armstrong* speaks about intellectual capital as a reserve and flow of knowledge available to the company. Such knowledge may be considered as intangible sources, which, together with tangible sources (funds, tangible assets), form a market or total value of the

⁴ KRIŽANOVÁ, A.- HRIVNÁK, M.: Restructuring of Network industries. In: VADYBA – Management, Nr. 3-4 / 2006

⁵ GORAM, N.O. - ROY, J. - WETTER, M.: Performance Drivers. John Willey, Ltd.

company. We mean a combination of human and structural capital under the term intellectual capital.

Human capital is characterized as a sum of native and obtained abilities, knowledge, skills, experience, habits, motivation and energy which the people dispose of and which may be used to produce products during some period of time. Ownership of human capital is concentrated on the person which disposes of the above character features in a free society. *Th. Schultz* introduced the above-mentioned definition of human capital. Economists enriched his definition in the late 90th of the 20th century.

Human capital represents the factor which gives a specific character to every organization. People form that element in the company which is able to learn, to innovate, to stimulate and make changes as well as to think creatively. This all is important for long-term successful operation of a company on the market.

Man's knowledge, habits and abilities have become considered a special **form of capital** because their development is very time-consuming and requires relatively big material sources. At the same time it ensures some earnings to that one who disposes of them, similarly to physical capital. Human capital is specific in the fact that it is bound with its bearer - an individual - from their birth, which means that it is impossible to steal it or to sell it. Since there is not any special market of human capital, its bearer can rent own human capital on the labour market.

„People form the most valuable source of every company.“ a lot of managers say, but when you ask them why they invest so little into such an important source then, you will find out it is easier for them to invest into technologies and tangible assets. It is because they can give reasons for the need of such investments more easily and moreover such investments are usually nicely visible and measurement of return on such investment is much easier than measurement of investments into human capital.

If HR managers fail to persuade company management about the importance of investment into development of human capital, the management considers the expenses related to its development only as costs and not as investments. Then there are the programs of human resources development which are first cut in harder times to decrease the costs within company plans adjustment. It is therefore very good if the management understands the BSC principles and creation the company value through intellectual capital properly. It is ideal when the company implements such approaches in their practice.

3. Investments into human capital – discussion

Current use of financial and non-financial resources in order to achieve financial or non-financial revenues in the future, but not satisfying of current needs, is an essence of creation or increasing a human capital value. All costs related to enhancing the extent, increasing the efficiency and extending the working of human capital are considered investments which may be either one-offs or they may be performed as long-term activities. Their effect is, however, always visible only in a longer time period.

Investment into education is mostly taken into account in connection with the analysis of the investment into human capital, which is a subject-matter of this article as well.

3.1 Model of evaluation of investment into human capital

Models for evaluation of education consist of a set of a few subsequent steps. A few models of assessment have been described in specialized literature, however, particular models which they are performed through, are usually not sufficiently elaborated and also available.

If we follow the literature (Vodák & Kucharčíková 2007), we can use an offered five-level model of assessment⁶ (Figure No. 2) together with the methods recommended in the above-mentioned publication. Choice of particular methods which will be used at the given levels of the process of education assessment is determined by conditions of a particular company.

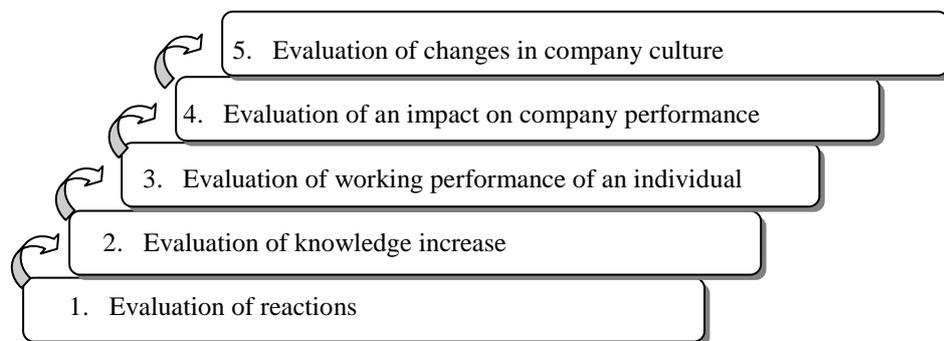


Figure No. 2 Presentation of the stages of the impacts of education assessment model

⁶ Vodák, J.: KUCCHARČÍKOVÁ, A.: Efektivní vzdělávání zamestnancu. Grada , 2007. ČR

All stages of the presented model are important. Participants may react positively on learning, they like it, but they will not have learnt anything. They may learn something but they cannot or they are not enabled to apply the learnt in practice. They apply it but it does not work properly at their workplace. It brings some benefit to their work but it does not help the company to achieve their goals⁷.

It is good to follow individual steps up to the level of the organizational unit or the company at application of the basic model of assessment because achieving the goals at such highest levels is exactly what the top management is concerned first of all. Proper model means a base, a framework and a tool which helps at measuring the achieved effects.

3.2 Approach to assessment of investment into employee education

Tendencies to assess efficiency of the investments in the area of human sources, which arise more and more often, cannot be ignored. To admit before the owners and the top management that the effects of educational programs cannot be measured, is something like to admit that such programs and their partial activities do not add a value to business. In general the management best understands a numerical form of benefits of different programmes in a company and therefore it is necessary to express the results of the assessment this way.

Both at investment into physical capital and at investment into human capital, particularly into education, the company sacrifice their current income in favour of the future earnings. Comparing the costs spent on educational programs and benefits coming from such investment are concerned in case of education.

Basic steps of a process of evaluation of investments used in companies at investment into physical capital are as follows:

1. determining the costs on the investment;
2. estimation of future earnings brought by the investment;
3. determining the costs on the capital – determining the rate of interest;
4. using the particular method of investment assessment.

In fact it is possible to use the above steps; however, calculation of the costs and mainly the benefits which come from educational activities forms a prerequisite for revealing the return on investment into education. However, the problem is not in determining the costs but it is in determining the financial value of benefits of the learning. Such problems are often

⁷ Vodák, J.: Vyhodnocovanie prínosov manažérskeho vzdelávania. EDMAN, Evidá, Brno, ČR

emphasized in practice. The above problems are similar as at other types of investments, especially in the service industry.

3.3 Design of a model of systematic assessment of return on investment into education.

Following the above mentioned criteria which result from the human resources managers' requirements, theoretical knowledge and experience with using the above model of assessment it is possible to propose a step sequence of a systematic process which may enable to achieve reasonable evaluation of a development program. The following steps are concerned:

- 1) Identification of insufficiency (performance gap) which we want to eliminate (one fault, customer's complaint, ...),
- 2) Matching a financial value to every stated unit of a performance gap,
- 3) Calculation of a total performance gap before the execution of education (for a time period chosen properly)
- 4) Planning the development program objectives, its execution and a method of evaluation,
- 5) Execution of the educational program
- 6) Collection of necessary data, evaluation of changes in performance and insulation of HR programs effects on the results from other effects running at the same time (organization of work, change of technology...).
- 7) Calculation of the achieved change in performance after execution of the program (for a chosen time period)
- 8) Stating the annual value of an effect of a performance change (a seasonal effect should be taken into account as well)
- 9) Converting the data to financial values (following the previous findings about the performance gap),
- 10) Stating the total costs on the program,
- 11) Calculation of return on investment (ROI, period of the return, efficiency of the investment...),
- 12) Identification of intangible benefits / earnings,
- 13) Documentation of successfulness of a program and updating the knowledge database.

If these steps are grouped into six areas stated in the Figure No. 3 purposefully, we will get a Model of assessment of return on investment into human capital development.

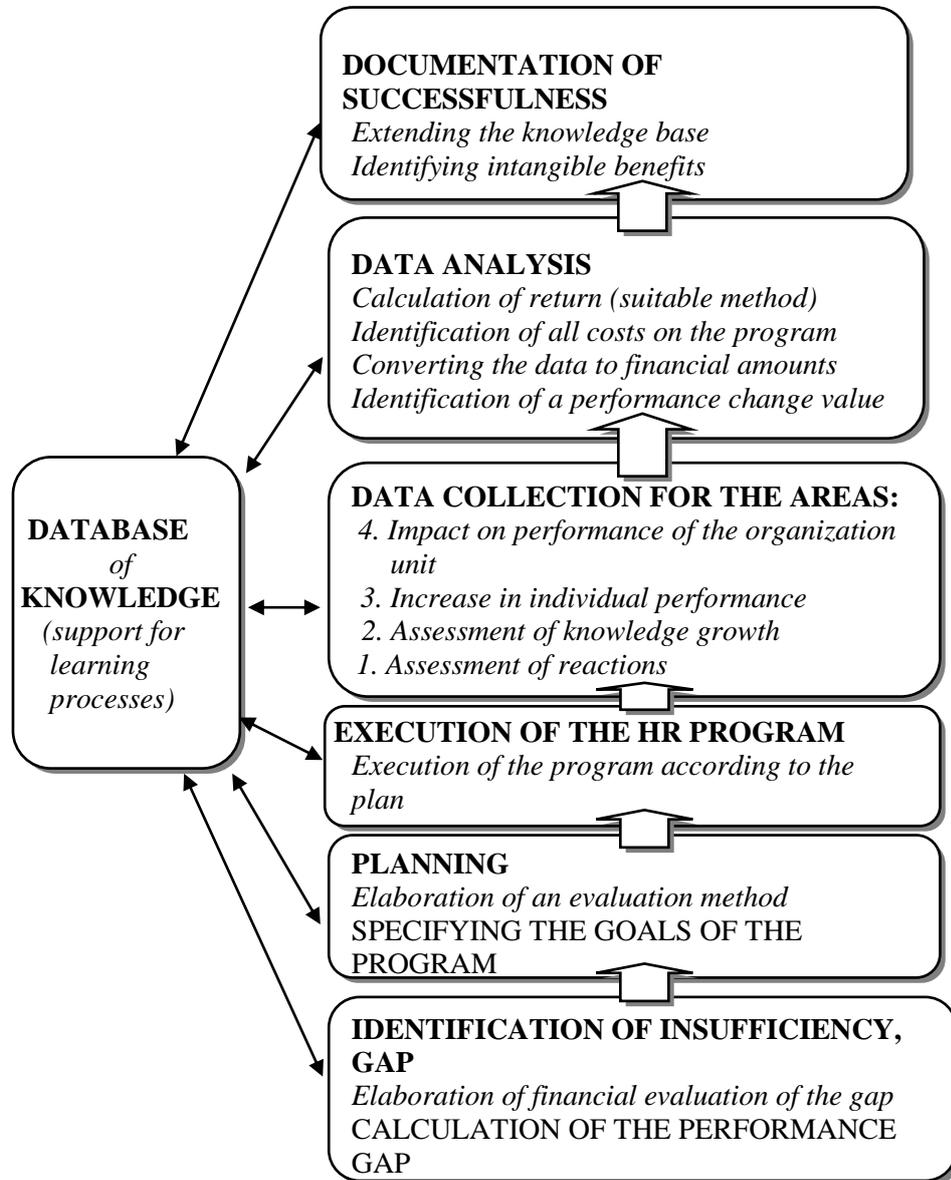


Figure No.3. Presentation of a Model of systematic assessment of return on investments in education

In the first step it is necessary to define measurable objectives of a selected HR program clearly. Then the elaboration of a detailed plan of its evaluation should follow.

Regarding to the data collection it is necessary to ensure the data collection during the all course of program, for both the first and the second stage of evaluation of the above-mentioned five-stage model of education assessment (satisfaction with the program, increase in knowledge, learning). It is very important to ensure feed-back, i.e. learning in a simple loop, which increases efficiency of the program. After completion of a part of the program or after some time after completion it is necessary to collect the data which is compared with the data gained before launching the program. Expectations with the real results are compared. Using the information from the program implementation and the effects on business are important (the third and the fourth stage of the above model from the Figure No. 2).

Regarding to the insulation of the program effects, in this step particular strategies and processes on how to designate a performance improvement rate connected with the development program exactly, are examined. It is a basic step because improvement of performance does not have to be caused solely by this program. Increased accuracy and credibility of the program is a result of good insulation of other effects.

When the performance improvement level, which is connected with the program directly, is specified, the data conversion into financial amounts follows. That means that it is necessary to specify a financial value of the units which the selected indicators are measured in. This is a very hard step, particularly in case of “soft” indicators such as customers’ satisfaction. This data conversion into financial amounts is often a very problematic part of evaluation of return on investment.

It is important to catch the costs on the given program. If specifying the return on investment is concerned, we have to know the costs besides the benefits as well. The meaning is in the most accurate monitoring and costs related to the program. In this step it will be necessary to catch all direct and indirect costs and then to present them clearly.

The following part is a calculation according to the chosen method of return (further specified below), which is usually calculated from the found benefits and costs. The benefits are expressed as annual benefits in case of short-term programs where they represent a saved or gained amount for the whole year after implementation of the given development program. Despite the fact that the benefits may flow also in subsequent years, it is worth consider if they should be taken into account or not. In case of long-term

programs the benefits shall be divided into several years. In such a case it is necessary to consider the time value of money.

Besides tangible, financial benefits development programs bring also less tangible benefits such as change of the atmosphere in the company, satisfaction of employees, increase of their ethics etc. During the analysis of the data an effort to convert as many data into financial amounts as possible is necessary. However, if such a conversion is too subjective or inaccurate, then it will be better to give the data as intangible benefits together with proper explanation.

Total evaluation and elaboration of the final report is the last step. Besides documentation of successes and revealing weaknesses the aim is also to build and improve knowledge management and permanent learning – on the level of a department and also of a company. Therefore the element of feed-back with the knowledge database has been emphasized in the designed model stated in the Figure No. 3. It is possible to utilize this model of assessment of the return on investment into human capital development virtually for every method, either a static one or a dynamic one.

Such evaluation, which has been stated above, should be interesting first of all for the HR department and then for the company top management. Not only the top management but in fact everybody who needs and approves such a development program, needs a process which enables them to make an approximate calculation of return on investment.

The same as it works at other kinds of investments. Relative simplicity and the low financial cost of the measurement process is an essential requirement. The whole process must be sufficiently simple, easily understandable, it must not require a lot of time from workers and finally it cannot be very financially demanding.

In case of the HR department it should also be a simple and easily understandable process which, moreover, takes the knowledge of its employees in this area into consideration. Also an internal customer needs a process which he can explain to others if necessary, he has to identify himself with it and trust it.

Every evaluation process costs time and money. Therefore it is necessary to decide firstly if evaluation is worth it at all. To make such a decision it is better to focus on the fact how well the sources have been used then on the amount of the investment itself. It is necessary to emphasize that the costs for evaluation should form only a small part of the total costs on the program. There are not any clear instructions on quantification of the amount of investment, however, it is good if such investment corresponds to the

situation in the company particularly regarding to other areas of its investment.

Sometimes it happens that the development program does not bring expected benefit from the internal customer's point of view. Simply said, the benefits of a share in economic result are lower than it was expected. However, an approach using a suitable method of evaluation of return increases trustworthiness of the data provided by the HR department to the company top management.

4. Calculation of return

Virtually all those who invest in people require the data which enable them to evaluate efficiency of the invested resources. The question "How will I know if it is worth that?" is a right question and is becoming more and more important.

4.1 Method of return

It is a method used to assess such investments like machines, buildings etc. At modifying the process we get the input data by, we can use this method also to evaluate efficiency of the investment into education. Return on investment indicator (ROI) is derived from generally used indicators of profitability of capital (assets, property). It does not take arrangement of profit in time into consideration⁸. It is a static method. The following simple formula is its base:

$$RP = \frac{\text{obtained amount}}{\text{invested amount}}$$

Using the above mentioned process which we achieve the input data with we are able to use this method very well also for evaluation of efficiency of investment into human resources development⁹.

4.2 Return period (pay-off period)

We can avoid the problems related to the accurate quantification of expected advantages from education partially if we start assessing the efficiency of investments from the different point of view and if we try to answer the question: "What should the financial benefits from education be like to have the spent costs at least returned to the company?"

⁸ KOZUBÍKOVÁ, Z. The Selected Methods of the Investment evaluation, In: Krizový manažment 1/2006, FŠI ŽU Žilina, SR

⁹ VODÁK, J. An Approach to Measuring the Return on Investment in the Area of Human resources, Ekonomie a Management,1/2006, Czech republic

Return period (RP) represents a simple and often used method of investment projects assessments, which is possible to be applied also to assess investments in education programs. Finding out such a period in which the flow of earnings brings an amount which equals the original costs on investment is concerned. If such an investment expense is a one-shot and the earnings from the investment are the same every year, then we calculate the return period that way that we divide the investment costs of the educational program by annual expected financial incomes (annual cash flow).

$$RP = \frac{\text{costs on investment}}{\text{annual cash flow}}$$

If the annual benefits from the investment change, then such a period should be found when the accumulated amount of cash flow equals with the spent investment expenses. In general the shorter the return on investment period, the more advantageous the investment. This method provides useful information about the risk and liquidity of the investment. The disadvantage is that the time distribution of the benefits during the pay-off period is not taken into consideration. It is possible to eliminate this disadvantage by discounting.

4.3 Dynamic approach to efficiency of investment calculation

The dynamic approach takes quality and productivity of the educational program into account¹⁰. Educational program is executed in a long-term period and particular number of employees is trained during it. In this approach we follow the requirement to balance costs and profits whereas the answer on the following question is searched for: “What minimum level of education is necessary to achieve settlement of the costs on education?” If the increase in employee’s work value brought up by the educational program per person and year is higher than the spent costs, the investment is worth it and vice versa.

The following relation is followed:

$$U_n = B - C$$
$$U_n = (Q \times P) - C$$

where: U_n ... net benefit
 C ... total costs

¹⁰ KUCHARČÍKOVÁ, A.: Zvyšovanie hodnoty ľudského kapitálu formou vzdelávania, Habilitačná práca. PEDaS, ŽU Žilina, Slovakia

- Q ... quality of the educational program
P ... productivity of the educational program
B ... total benefits

Total costs (C) are a sum of the one-shot initial costs and the through costs spent during execution of the program. Quality means a parameter which represents net increase in value of work of one employee per year. It is a difference between the increased value of employee's performance (e.g. increased value resulting from the higher number of sold products) and additional costs necessary to keep and increase the performance (advertising costs, new shop...). Productivity (P) of education expresses how many trained employees there are in the working process during the whole period of educational program (man-years). However, not a simple sum of trained employees involved in every year of education period is concerned. We use a cumulative sum for each year of execution of the educational event. That is because e.g. employees trained in the first year of education bring higher productivity during the years when other employees are being educated and not only after finishing of the whole educational program. Provided that the net benefits is zero (U_n), we are able to calculate the parameter of quality of the education program and also to find out what level of quality should the program have at least to give back the spent costs per one employee taking the productivity of the education program into account.

There are a few ways how to reassess the question whether to invest or not to invest into development of people in the company from the point of view of financial expression in the article. If a long-term flow of benefits is concerned, then it will be necessary to ensure more frequent evaluation. It is good to evaluate earlier than the total benefits occur to be able to catch possible trends.

Following the information from managers and personnel specialists in our companies the criteria which the process of efficiency of investments in educational programs evaluation should meet to be accepted and to have a chance to be implemented in a company can be identified. Such a process should be:

- simple;
- trustworthy;
- cost-efficient;
- reliable;
- should take also other related factors of educational programs into account;
- suitable for different types of educational programs;

- flexible;
- usable at different kinds of data.

Increasing **importance of human resources** and a need to improve the ability to compete force the companies to think about measurement of return on spent investments in the area of human resources. It is possible to make a very efficient tool which helps HR department to enhance their prestige and to organize their programs better by a systematic approach. It provides the top management with a good opportunity how to improve planning by the fact that different relations in the organization may be quantified better using the above-mentioned model.

Conclusion

Every company has limited sources and such limitations are likely to rise. Passive waiting for assignment of sources from the management of the organization will not always be the best solution¹¹. Contrary to it, a proactive approach enables an initial amount of sources to be assigned according to the expected efficiency and after a specified time benefit of the program shall be assessed and following the results the program shall be stopped, paid additionally according to the plan or additional sources for further development shall be assigned.

Every man likes doing a job that has a sense and that is appreciated. Persuasive proving of successes of human resources department helps to increase its prestige, it provides very persuasive arguments at distribution of sources for new programs, shows trends in this area and it is a significant contribution to knowledge management. For the employees who are responsible for implementation of development programs good evaluation of achieved results, besides the positive feed back from internal customers, may be the proverbial cherry on a cake.

In this period, which is typical with big and rapid changes, **education**, which contributes to growth of knowledge and skills efficiently, is considered the most important factor of progress, increase in productivity of production factors and increase in value for interest groups. It is necessary to adapt the new gained knowledge on current needs and possibilities of particular companies and all the economy creatively. Education can be

¹¹ PETROVIČOVÁ, J.: Current Level of Marketing Planning in Small and Medium Sized Enterprises in Chosen Branches of Slovakia, In: Economics Theory and Practice II, UMB, Slovakia.

considered an important source of acceleration of economic growth and increasing the company market value¹².

The article has pointed out the wider context of the importance of human capital for company success in the context of approaches of strategic management and intellectual capital. It has emphasized the importance of measurement of investment into human capital development, it has pointed out the related problems and it has designed a model for systematic assessment of return on investment into education. This model can contribute to higher efficiency of work of human resources departments in companies and thus to better satisfaction of needs of particular interest groups at proper application.

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