

THE ROLE OF HUMAN RESEARCH AND HUMAN INNOVATIONS IN IMPROVING ORGANIZATIONAL EFFICIENCY

A HUMÁN KUTATÁS-FEJLESZTÉS, A HUMÁN INNOVÁCIÓ SZEREPE A SZERVEZETI HATÉKONYSÁG FOKOZÁSÁBAN

GÁBOR JUHÁSZ,
GÁBOR KEMÉNY
KATALIN SZENDRŐ

Abstract

The main goal of human research and development is to transform the internal conditions of the enterprises through planning and implementation of organization and personnel development interventions in order to improve efficiency, effectiveness, performance and competitive power. In the framework of cooperation ensured by the Human Exchange Human Resource Development and Consultant Foundation, we have been conducting social and human research and development projects on behalf of various Hungarian companies, enterprises, civil/non-profit and budgetary organizations for ten years. In our experience, human innovation in organizations may significantly improve the efficiency of the organizations.

Keywords: human research – innovation – organizational development – non-profit sector

Összefoglaló

A humán kutatások és fejlesztések fő célja a vállalkozások belső környezeti feltételrendszerének átalakítása szervezet-és személyzetfejlesztési intervenciók tervezése és lebonyolítása révén, a hatékonyság, a teljesítmények növelése, a versenyképesség fokozása érdekében. A Human Exchange Emberi Erőforrás Fejlesztő és Tanácsadó Alapítvány által biztosított üzleti-együttműködési keretrendszerben tíz éve kivitelezünk társadalomtudományi-, humán kutatás-fejlesztési projekteket a Magyarországon működő vállalatok, vállalkozások, valamint civil/non-profit szervezetek és költségvetési intézmények megbízásából. Tapasztalataink szerint a szervezetek esetében alkalmazott humán innováció jelentős mértékben növeli a szervezetek hatékonyságát.

Kulcsszavak: humán kutatások, innováció, szervezetfejlesztés, non-profit szektor

Introduction

After the change of regime the Hungarian economy has gone through a significant transformation. Human resources have become the key factor of the major and intensive changes in economy and society. The overall goal of Act XC of 2003 on establishing the Research and Technological Innovation Fund is to facilitate competition and sustainable economic development in Hungary. As important precondition of this development, enterprises should lay more emphasis on innovation in general, as well as on human research and development goals and actions. In accordance with the above mentioned objective the Research and Technological Innovation Fund has been established as a separated government fund, ensuring the flow of paid-in financial goods back to enterprises to

support innovation.

In the framework of cooperation initiated by the Human Exchange Human Resource Development and Consultant Foundation, we have been conducting social and human research and development projects on behalf of various Hungarian companies, enterprises, civil/non-profit and budgetary organizations for ten years. Our organizational inventions focus on human resources. In the course of our human research projects we thoroughly analyse the conditions of organizational structure and operation, the role of organizational culture, the channels and ways of communication, the systems of performance evaluation and motivation, as well as other areas of human resource management. In our experience, human innovation may significantly improve the efficiency of the organizations.

Major approaches: human capital, human resources, human innovation

The processes in modern economy in the 1950s and 1960s resulted into the complex understanding of the concept of capital. In his treatise titled „Investment into human capital” (Schultz, T.W., 1961,1983), the Nobel prize-winning T. Schultz made a parallel analysis of investment into human resources and real capital. In Schultz’s opinion, people can increase the number of their possible options by investing into themselves. The labourers can become capital owners by acquiring economically valuable knowledge and qualification. This knowledge and qualification comes into existence as a result of conscious investment and this, together with other investments, contributes to higher level of productivity in technologically developed countries. In Schultz’s understanding education is an investment producing a specific kind of capital incorporated in the participating person. Schultz calls this increment human capital. It cannot be alienated from the individual as it is an organic unit of the personality but it still can be considered a kind of capital because it has the capacity of providing valuable service. The basis of education in Schultz’s understanding is the supposition that the growth of national capital is mainly a result of the development in human capital.

S. Rosen (Rosen, 1977) argues that human capital is a kind of capital that consists of abilities and productive knowledge of individuals. Consequently the increment of investment into human capital is the growth of professional knowledge and income-earning ability of the individual, as well as the effectivity of economic decision-making. Rosen states that those individuals who are in the state of permanent poverty have less or less valuable qualifications than those who live in a better financial condition. In his opinion the best way to reduce the extent of poverty is providing resources for the poor through education and training.

In the course of human innovation, the individual or the team that produces creative work is not regarded as a factor of mechanic production merely. Rather, it is considered – in accordance with its role in the discipline of human resource management – as a constituent of the environment in a broader sense (social, economic and cultural) and an element of an individual-psychological and biophysical system. This approach of human innovation and management covers a broader spectrum as it can be discussed from psychological, cultural, physical, biological, economic, legal and sociological perspectives.

The results of research on corporate behaviour in the 1960's and 1970's point out that employees are investments of human capital that need constant improvement to increase effectivity on organizational level. The key of effectivity is the better performance of properly qualified, motivated, satisfied and loyal employees. This must be consolidated by employee-friendly work conditions and environment as well as implementation of appropriate human resource principles and programmes. The advantage of these factors is not only the fact that they provide the necessary conditions but they also motivate employees to carry out further improvements in order to accomplish corporate aims based on their own individual, common and organizational interests. Thus it is important to identify, develop and strengthen economic and social interests to permanently sustain a value-creating community that has social and economic benefits for the members.

N.F. Elbert (ELBERT, CIT. KAROLINY, FARKAS, POÓR 1999), an American scholar asserts that employees, in case they are managed and improved effectively, are a sort of investment that are capable of offering long-term advantages for the organisation in order to achieve higher productivity and better performance. To attain this objective it is essential to have appropriate principles, procedures and programmes that satisfy the social and economic needs of employees. While there are several differences worldwide in approaches and practices, all scholars share the same view about the primary importance of human resources as the most important kind of capital.

Gyula László explains that human resources are special and primarily important among other resources since they have a unique value-forming and creative capacity. The concept of human resources has two layers; on the macro-level it conveys the significant social and economic effect of employment and earnings. On the micro-level the workforce – as a factor of production – on the one hand is a resource (from the perspectives of economy and management), on the other hand it is a human being (an entity that can be approached on individual and social basis and comprising mental, cultural and bio-physical dimensions). These approaches of human resources are sometimes conflicting but we must take them into consideration and explore their correspondences. In addition, multifactor external (social and employment) and internal (organizational, professional and individual) conditions must be considered in a complex way so that we would be able to properly understand and use human resources. These approaches altogether determine the importance of human management (LÁSZLÓ 1997)

Based on the decade-long experiences of developed countries, those organizations can cope with tasks and problems of accommodation more successfully, where management has realised the significance of human resources in improving the effectivity of the organization. As a result of this experience, the number of organizations implementing the different functions of human resource management and human innovation has notably grown. Human functions, first implemented by industrial companies, have soon appeared in other sectors, such as services, agriculture, public administration and non-profit sector. The new approach has gone beyond the level of organizations and has become an important area of improvement of regions, states and the European Union. The scope of areas affected by human innovation and human resource management has broadened; education, public health and social services are closely connected to human innovation and management in

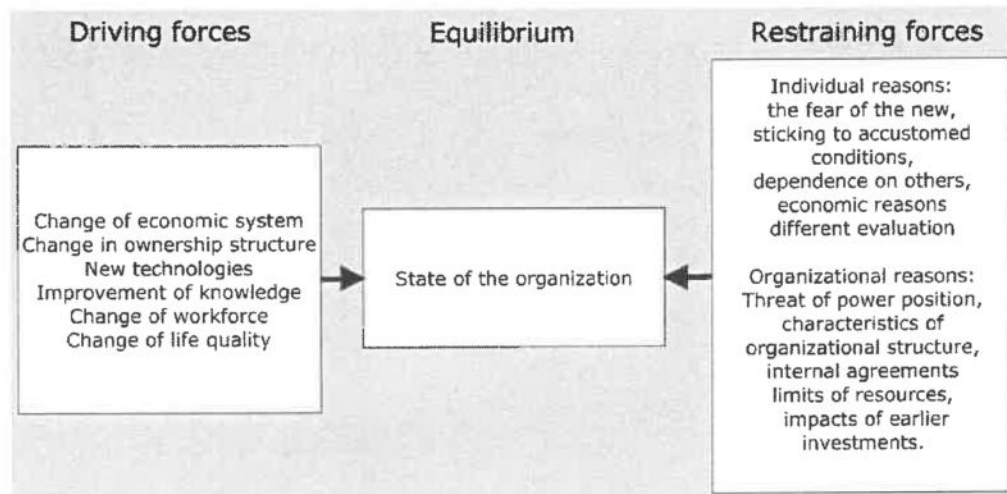
order to overcome traditional difficulties by implementing new approaches and solutions.

An acclaimed American representant of the theme, D. Ulrich (1998) argues for the strategic importance of human innovation and human resource management. He points out that, with regard to the operation of the organization, it is essential to have an external structure, determining the ways of market behaviour and appearance, and an internal structure that is responsible for the provision, application and control of resources. These two strategic parameters must be adapted to each other and they need to reflect corporate identity. The emphasis is on employee behaviour, regardless of the organizational strategy that aims at growth or stability.

Organizational changes, human resource development, and organizational culture

Changes must be considered as natural, everyday phenomena in the operation of organizations. They can happen spontaneously or as a result of conscious preparation and can affect all the organizational levels or different structures of operation. According to their scope the changes can take place on individual or organizational level. Changes on organizational level can affect tasks, structures or systems, and as a result of their interactions changes can be regarded as processes. Conscious and reasonable transformations generated by the organization, under the leadership of managers are the attempts to answer challenges of the external environment, by which the organization intends to accommodate its internal characteristics to external conditions and requirements.

Figure 1. General model of force field analysis



Source: Farkas, Poór, Karoliny (1993)

Human resource development is an area of key importance among complex employment- and organization development interventions that lead to human innovation. Development of human resources is another area of key importance. Human resource development comprises the series of improvement-oriented interventions that facilitate change, accommodation level and the increase of performance in the organization by changing individual skills and attitudes. Previously estimated demands and the given qualitative level of human resources are the bases of defining improvement requirements

and succeeding interventions. The applied methods and techniques of improvement can be differentiated as internal and external methods and programmes. Techniques employed include frontal methods aiming at cognitive knowledge acquisition and experience-oriented learning processes in groups.

Internal and external human resource development actions of the organization – including training, education, re-training and ability improvement – aim at improving the knowledge basis in the organization. Additionally, these actions enhance the organization's capability to accommodate changes in order to achieve effectivity, and improve and maintain competitiveness in the long run.

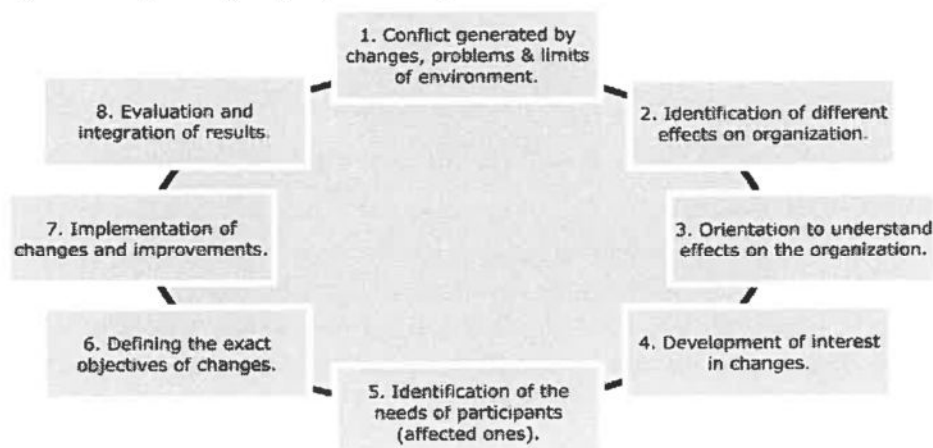
The force field analysis model (figure 1.), invented by Kurt Lewin (Lewin 1951), represents the factors that have a role in organizational changes. According to this model there are forces for and against changes. The organization as a system is in the state of optimal balance when the driving forces and restraining forces are in equilibrium. At the instant when the driving forces become dominant the organizational change begins. The relation of restraining forces in the organization can be changed by the intervention of the management or advisors.

C. Handy argues that organizational culture manifests internal integration by which the organization becomes able to unite its resources and utilize them in order to handle external effects. Organizational culture comprises common behaviour rules, philosophies, mentalities, as well as norms, values, beliefs and linguistic terms that represent a unique atmosphere, characteristic of the organization. (Handy 1984) These objectives, methods and functions determine the development of internal organizational procedures, structures and systems that are able to compensate market competition.

The concept of organization development

The concept of organization development covers an approach of change management comprising a planned, top-down intervention into internal processes aiming at increase of effectivity and the proper operation of the organization.

Figure 2. The process of organization development



Source: Farkas, Poór, Karoliny (1998)

As shown in Figure 2., the Organization Development Model (OD-model) is a process that incorporates a series of planned actions and an interdisciplinary approach towards the whole organization.

The objective of organizational development is the harmonization of individual and collective aims, interests, integrating and controlling them in a complex structure, and, by these activities, assuring the standardized operation of the organization and the growth of individual content.

The role of management consulting in organization development

Management consulting, as a part of organizational development, can be carried out most effectively in training groups. Accommodating to group dynamic conditions, process consulting comprises the discovery and organization of resources that previously existed as idle capacities. In the course of training group skill development the consultants, through the active participation of trainees, teach the methods that can be applied effectively in organization development. Group-training is aimed at ability- and skill development of individuals and groups. As the second step, knowledge and skills acquired by participants must be integrated into the development process of organizational culture. (Figure 3.)

Special cases of consulting include task-oriented organization development trainings that support the team development during performing the tasks and strengthen the quality of cooperation among participants.

Figure 3. Process of organizational change



Source: Farkas, Poór, Karoliny, 1998

One type of task-oriented trainings focuses on action-defining or target setting by means of dynamizing and reallocating the human and material resources of the given organization to motivate creative and change-oriented actions and initiatives. The intervention is process-oriented, making a top-down effect on different layers of the organization, enabling them to contribute individually or collectively to changes and innovations.

Task-oriented trainings offer a special opportunity for organizations to get involved in a multi-layer and multi-directional change that brings forth the positive transformation of their internal and external environment.

When the internal environment of an organization is at the focus of the investigation, usually the following factors are studied, regardless of the sector the organization belongs to: the consistence of strategic and operational goals of the organization and their relevance to internal and external conditions, their financial conditions, the quality, adequacy and type

of technical infrastructure they use, as well as the role and significance of organizational structure and culture in the accomplishment of their goals, tasks and activities.

People are considered as the most important resource because of their special role. Therefore internal characteristics should be defined and analysed with regard to their relationship to human resources, following the ideas of F. Farkas, J. Poór and M. Karoliny (1993) in their book titled "Human resource management" as the starting point. Based on this treatise we can assert that lack of organizational strategy hinders the development of human resource policy and practice. Motivating, encouraging and organizing human resources are impossible without a vision of the future and opening perspectives or in the absence of human resource guidelines or solutions. The operational goals and decisions must be defined on the levels of the organization where it is necessary to give direct answers day by day to effects and actions influencing the organization. These goals, decisions and the respective actions have a direct impact on human resource activities. Financial conditions of the given organization determine the development of different areas, the possession of necessary own source for innovations, the ability to pay wages and fees for further education or training. The quality and extent of technical infrastructure has an impact on the effectivity of work, the quality of performance and on the responsibilities of the employees. The latter implies the knowledge, skills, abilities and qualifications expected from employees and, furthermore, the extent and character of their competence. The existence of certain organization- and culture-specific factors are essential for the development of organizational culture. These include specific customs, traditions, values, norms, mutual requirements, common language and specific signs and symbols. These can only be developed and strengthened by long term and permanent operation.

For civil organizations training facilitates the analysis of internal and external conditions and the evaluation of opportunities and threats on a common platform. The training gives an opportunity for the emerging of those key personalities who have the capacity to establish a network of previously described cooperations, to dynamize available resources and to improve the community and the organizations.

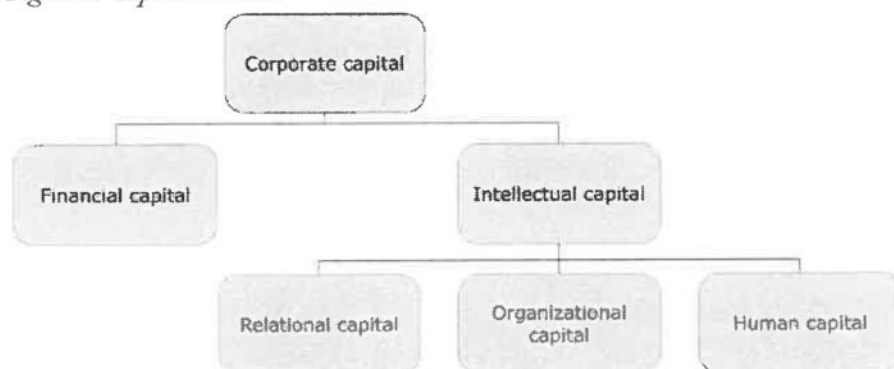
Suggestions and Conclusions

After the change of regime in Hungary the role of human resources and human innovation has been considered more important in economic life as a consequence of technical and social development. The economic transition has brought forth the chance to develop the so-called "knowledge-based" economy, in which – as opposed to industry and agriculture – the sector of services is becoming more significant. Services sector represents a higher proportion in economy utilising intellectual capital effectively in order to ensure competitiveness and maintaining corporate values. Intellectual capital and its effective improvement have become the primary success factor of organizations. (GYÖKÉR 2005) Many researchers elaborate on the structure of the organization's capital including the main factors of intellectual capital and its major values (Figure 4.)

An important factor of intellectual capital is relational capital, which includes the relation with customers, subcontractors and partners. The capital of the organization, as a result of its earlier actions and operation, comprises infrastructure resources, such as the

major elements of information system, and immaterial resources, such as results of the organization research and innovation. Human capital incorporates the characteristics and competences of employees and represents the human being as the most important element of value production process. Its main components include cognitive and experience-based knowledge, abilities, skills and competences that can be utilised and improved in the course of innovation.

Figure 4. Capital structure



Source: Gyökér, 2005

The quality and improvement of human capital is primarily determined by the objectives, functions, significance and structure of human resource management of the organization.

The objective of human resource management is the effective utilisation of human resources in order to realize organizational and individual aims. (GYÖKÉR 2005) The human resource-based approach considers the employees the basic resources (of strategic importance) as opposed to the previous approach, according to which employees are wage-workers and mere factors of production. Human resources have a primary importance in innovative, knowledge-based organizations ensuring the appliance of technology and the necessary human resource development.

The system of corporate or business strategy and human resource strategy must represent a harmony in which the achievement of human aims ensures the attainment of business objectives. This integration implies three types of relations existing in practice. The first type comprises an accommodation process, by which the human resource system takes part only in the achievement of business objectives. In this case human resource functions provide answers from the viewpoint of business strategy. Besides their strategy determining role, aspects of human relation have a direct influence on corporate management philosophy. The third aspect assumes a wholly integrative, dynamic and versatile set of relations, the reflexive interaction of business and personal objectives.

Schumpeter (quoted by CSATH 2001) points out that innovation skills and performance determine the acquisition of advantages in competition. Consequently, the competitiveness of organizations can be improved by accumulating more knowledge in their products and services. This can be realized only by constant improvement and effective use of knowledge capital. The condition of improving knowledge capital is the permanent retraining of employees as well as research and innovation. Effective use of knowledge is

not feasible without appropriate management, organizational and motivation methods.

Knowledge management taking place within the organization is determined by adaptability, which means the use of integrated knowledge: it analyses the connections of knowledge, behaviour, environment and motivation in the same context. The result of knowledge management is a new, adequate knowledge material which, if it is given to appropriate people at a proper time will develop a positive synergy. As a result, information is transformed into activities that foster the processing of information in order to improve the performance of the given institution or enterprise. The basic objective of knowledge management is the improvement of mental skills, the system-based approach to information processes, the development of relevant knowledge and management of necessary methods. Information management based on information technology is an important factor of research on creative and innovative capacities of the individuals. (SZEDLÁRNÉ 2005)

Reference

- BORGULYA I. - BARAKONYI K. (2004): *Vállalati kultúra. (Corporate Culture)* Nemzeti Tankönyvkiadó, Budapest.
- CSATH M. (2001): *Stratégiai változtatásmenedzsment. (Strategic change management)* Aula, Budapest.
- ELBERT, N. F. - KAROLINY M. - FARKAS F.- POÓR J. (1992-1998, szerk.): *Személyzeti/ emberi erőforrás menedzsment. (Human resource management)* Közgazdasági és Jogi Könyvkiadó, Budapest.
- GYÖKÉR I. (2005): *Emberi erőforrás menedzsment. Oktatási segédanyag. (Human resource management)* Budapesti Műszaki és Gazdaságtudományi Egyetem Ipari Menedzsment és Vállalkozásgazdaságtan Tanszék. Budapest.
- HANDY, C. (1984): *Organizations*. Penguin, Harmondsworth
- LÁSZLÓ GY. (1997): *Emberi erőforrás-gazdálkodás és munkaerőpiac. Human resource management and the labour market*. Janus Pannonius Egyetemi Kiadó, Pécs.
- LENGYEL GY. – SZÁNTÓ Z. (szerk., 1998): *Tőkefajták: A társadalmi és kulturális erőforrások szociológiája. Forms of Capital. The sociology of social and cultural resources*. Aula, Budapest.
- LEWIN, K. (1951): *Field Teory in Social Science*. Harper and Row, New York.
- ROSEN, S.: *Emberi tőke (Human resource)* In: Lengyel Gy. – Szántó Z. (szerk., 1998): *Tőkefajták: A társadalmi és kulturális erőforrások szociológiája*. Aula, Budapest.
- SCHULLER, R. S. (1992): *Strategic Human Resource Management*. Organizational Dynamics, Vol. 21., No. 1.
- SCHULZT, T. W. (1983): *Beruházás az emberi tőkébe. Investments into Human Capital* KJK, Budapest.
- SZEDLÁRNÉ G. I. (2000): *A tudásmenedzsment vállalati jellemzői. Corporate characteristics of knowledge management*. Előadás szöveg. III. Országos Humánpolitikai Konferencia, Budapest.