

## **THE THEORETICAL BASES OF ENTERPRISE HUMAN CAPITAL MANAGEMENT**

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### Abstract

The article presents the essence of human capital discussed from the perspective of enterprise. It also describes the theoretical bases of managing this resource and indicates remarks concerning its development. Human capital management is defined as the process of implementation of the management functions focused on human capital in the way enabling the efficient achievement of the organization's goals and allowing to achieve high economic effectiveness. The development of human capital requires the consolidation of numerous activities in knowledge-based management, management of staff competences, organizational capital management and relational capital management.

Keywords: human capital, human capital management, human resources management.

## **INTRODUCTION**

The development of knowledge-based economy and the constant search for the sources and methods of improving the competitive position by enterprises have brought about the growth of interest in intangible assets. Their basic subsystem is intellectual capital constituting this part of enterprise intangible assets which is used in the value creation process (Mikula and Pietruszka-Ortyl, 2010, p. 39). Another very important object of the search for the growth of the effectiveness of enterprises' activity are human resources of an organization. In new organizational models (e.g. knowledge-based organizations) people occupy a central position, they are the driving force of enterprise development, in their heads they possess personalized knowledge enabling to introduce the remaining knowledge-based assets in the conversion process and optimally use tangible assets. Thus, in the conditions of great uncertainty, volatility, diversity and complexity of relations, the significance of people's professional qualifications and the ability to act independently is growing. A special distinguishing feature of the human resource working for an organization is that it is a conveyor of so-called human capital.

The notion of human capital is not new. Over 200 years ago, Adam Smith (1776) recognized the significance of human skills as the source of individual and national wealth. In economics, the human capital issue revived in 1960s. Among others, G. S. Becker, T. W. Schultz, B. F. Kiker wrote about it, but the capital was understood as the sum of investment in activities like education, health, training in the place of work and migrations which increase the productivity of a given person on the labour market. In 1990s, human capital aroused broad interest of OECD which in 1996 defined it as the knowledge people acquire during their life and use to produce goods, services or ideas in market or non-market circumstances. However, in 1998 OECD verified its definition describing human capital as "the knowledge, skills, competences and other attributes embodied in individuals, which are vitally important for economic activity" (Yu, 2001, pp. 2-3).

This article presents the essence of human capital discussed from the perspective of enterprise. It also describes the theoretical bases of managing this resource and indicates remarks concerning its development.

## **HUMAN RESOURCES VERSUS HUMAN CAPITAL**

In 1980s, human resources management was initiated. It was when in the search for new factors of raising the effectiveness of enterprises' activities, bigger attention was paid to the work potential inherent in people and a necessity to invest in the development of this resource and achieve the maximum effects from this investment was considered (Pocztowski, 1998, p.

20). The concept assumed that for the best possible achievement of enterprise objectives, it is necessary to farsightedly approach the issue of managing people and treat them not as variable cost but rather as fixed asset. Hence, in human resources management people are perceived as a valuable source of successes and therefore, they must be ensured the best leaders and opportunities for the full development of the possessed abilities (Armstrong, 1996, p. 9). However, it should be emphasized that human resource is the population of workers. It is organized workforce creating a system which, for the purposes of management, is discussed from the organizational, ergonomic, psychological, socio-economic and legal point of view (Stabryła, 2001, p. 183), yet, the quantitative, calculating and economic aspect is of special significance here, emphasizing though that human resources management (in the “hard” version) should proceed in the “natural” way, that is as with reference to any other economic factor (Armstrong, 1996, 33). This variety of human resource management has found special application during the crisis since 2008.

At present, the population of people working for an organization is often analyzed from the point of view of the volume and the kind of possible contribution to the process of value creation. Thus, the following are distinguished, for example:

- knowledge practitioners, knowledge constructors, knowledge commanders (Nonaka and Takeuchi, 2000, p. 185),
- knowledge workers, internal workers and peripheral workers (Morawski, 2009, pp. 84-85),
- visionaries, knowledge workers, personnel, partners participating in the value creation process (Mikuła, 2010, pp. 15-17).

Then, with reference to those typologies, taking into consideration the volume of people’s work effects possible to be achieved, the way of managing them is differentiated. The consequence of such an approach are contemporary concepts, such as the competence-based human resources management, competence management, talent management.

A special feature of human resource is possessing knowledge (explicit and tacit, declarative and procedural), abilities (including talents), health, values and norms, as well as adopting attitudes and behaviours in the organization and towards it, which, with the use of the remaining assets of the organization, enable to achieve its goals. The entirety of intangible assets the conveyor of which are people is defined as human capital. However, considering it in more detail, the way of formulating it may be different.

In the literature of the subject in the field of management, two major ways of defining human capital prevail<sup>2</sup>. The first of them formulates human capital as the sum of resources the conveyor of which are people, possibly an individual. For example:

- human capital is the totality of qualities and properties inherent in people being the source of value creation. It consists of employees' abilities, skills and motivation (Pocztowski, 2003, p. 6),
- human capital is the aggregation (sum) of inborn skills and knowledge, as well as the skills individuals acquire and develop all their life. Inborn abilities are an inherent potential of an individual, inseparable of him or her. They are defined as all physical, intellectual and mental abilities man possesses at time of his birth (Laroche et al., 1999, p. 89),
- "human capital is knowledge, experiences, presence and possibilities to act of a man in the enterprise. Human capital consists of competences and skills of employees and management staff" (Sokołowska, 2006, p. 223).

In the second group of definitions, the intention to formulate coherently the components of the capital whose conveyor are people is visible. For example:

- human capital is "the combined knowledge, skills, innovativeness and an ability of individual workers to perform tasks efficiently. It also includes enterprise values, organizational culture and philosophy" (Edvinsson and Malone, 2001, p. 17),
- human capital is "a set of mutual relations among employees which, in addition to the fact that they connect people, have value in themselves" (Warner and Witzel, 2005, p. 90).

Seemingly, the difference between one way of understanding human capital and the other may be small. However, adopting one of the indicated two groups of thinking about human capital brings significant consequences for the management practice and the measurement of this resource value. Treating human capital as a simple sum of resources, qualities and properties the conveyors of which are people, eliminates the dimension of possible complementarity and cooperation of its components. Looking from the angle of co-dependencies or mutually binding relations indicates that via proper management there is a possibility to use human capital components better and achieve the synergy effect. Therefore, it can be recommended to treat human capital as the configuration of the resources creating personal intellectual capitals of people. After channeling (through setting goals) and linking it with the remaining resources of the organization, the capital activates the organization activities

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<sup>2</sup> Of course, in the literature of the subject we can find different definitions of human capital. For example, it is sometimes defined as "employees characterized by specific features" (Król, 2000, p. 241). This and other extreme formulations will not be discussed here.

for value creation. To a great extent, the volume of the achieved value depends on the mutual matching and the kinds and structures of links among all the resources participating in the activities. Therefore, the characteristics of human capital must be made more detailed by adding its specificity on the level of intellectual capital of an individual, the level of the team of people, the level of the organization and the inter-organizational level.

Intellectual capital of an individual is defined in various ways. For example, according to W.L. Hudson, it is a combination of genetic heritage, education, experiences, attitudes to life and business (Hudson, 1993, p. 16). D. J. Skyrme's (1999, p. 142) attitude to this resource is different. Within its framework he distinguishes: competences (experiences, knowledge and skills), structural factors (processes and networks, e.g. contacts and sources of information), customer factors (relations and reputation), others (e.g. copyrights, designs).

Basing on D. J. Skyrme's approach, we can assume that intellectual capital of an individual consists of the following elements:

- competences constituting a combination of knowledge, an ability to act (including, among others, talents, intuition, various kinds of intelligence), as well as attitudes to life, work and business, which create the wholeness in terms of goals and the conditions to act,
- structural factors are mainly relations within the interpersonal intra-organizational network (within the formal and the informal structure of the organization), reflected in the quantity and quality of contacts giving access to information and knowledge, as well as other resources, the localization of the position in this network alongside mutual dependences (depending relations and dependences) determined, among others, by a formal and real authority, participation in processes and the scope of possibilities to steer them,
- customer factors are a network of contacts with external partners (suppliers, customers, etc., and the employer), and the power of influences (among others, owing to the developed individual reputation), connections,
- personal intellectual property (e.g. possessed patents and copyrights).

Intellectual capital of an individual is inseparable from him/her and is his/her property (Laroche et al., 1999, p. 90). However, it can be used by enterprises by involving its owner in the process of work.

From the point of view of efficiency and effectiveness of enterprise activities, the key levels to discuss human capital are the team level and the organization level. Human capital of the team level is created by the configuration of individual personal intellectual capitals of people constituting this team. On mutual matching, appropriate diversity, adaptation,

complementarity and redundancy depends whether a given team will be able to achieve above average results and the synergy effect.

Matching means that all the components of the team level human capital create altogether a holistic system of the implementation of the imposed objectives and tasks. Thus, there are no deficiencies in knowledge resources, abilities (including necessary talents), attitudes, relations, authority and influences, as well as intellectual property, or the skill to acquire them effectively, which would make the task implementation and goal achievement impossible.

Proper differentiation means that specific components of individual intellectual capitals of team members:

- 1) differ from each other and are equipped with appropriate scopes of advanced specialization, which enable the realization of specialist tasks,
- 2) have shared areas of general competences, which enable people, among others, to communicate and share knowledge - it is the base of redundancy.
- 3) Adaptation means that people tolerate each other in spite of differences existing among them and have motivation to cooperate. Any forms of discrimination are unacceptable (e.g. in access to information, because it can be an obstacle in conducting later discussions - sharing knowledge). Trust is the basis of mutual adaptation.

Complementarity means the complementation of individual human capitals and is the foundation for building a common position (common opinion). The base of complementarity are, among other things, value judgments which are defined by K. E. Sveiby (1997, pp. 35-36) as consciously or unconsciously operating filters indicating in the cognition process what an individual considers right.

The base of redundancy is the redundancy of information and knowledge but also overlapping of individual resources of knowledge, abilities, relations and attitudes with their scopes with so-called common parts, which is one of the basis of adaptation. Redundancy can be compared to the principle of stock used in Japanese enterprises. The stock enables to create a common cognitive ground among employees by overlapping the resources of the obtained information, which fosters the spread of explicit knowledge and the internalization of this knowledge by employees (Nonaka, 2006, pp. 45-46). Thus, redundancy means redundancy in the sum of intellectual capitals of the team members, which enables to undertake unexpected tasks and increases the level of organization flexibility.

Complementarity and redundancy are necessary for the mutual replaceability of individual components of the team members' intellectual capitals in crisis situations.

Human capital of the organization level is created by the configuration of human capitals of individual teams and intellectual capitals of the people working on independent positions operating within it. Work results and the synergy effect level depends on the same qualities as work effects on the level of the team human capital. In small organizations the level of human capital of the team may concur with the level of the organization's human capital.

Discussing human capital on the inter-organizational level means:

- considering constant cooperation of an enterprise with external partner (cooperation, strategic alliances), which translates into the creation of joint, constantly operating teams (e.g. in product research and development),
- considering cooperation with individual partners participating in the process of value creation permanently, on the short-term basis or spontaneously - they are consultants, representatives of supportive partners (e.g. leased personnel), people from the circle of suppliers and institutional and individual customers who have taken over the performance of some tasks from the organization or support their performance, e.g. independently determine the qualities of products, design elements of purchased products with the use of a computer, collect information, create advertising slogans, participate in the implementation of ventures, make bank transfers, etc. They can be divided from the point of view of the size of the contribution to the created value in the organization and the knowledge they make accessible to the organization to create value, e.g. external knowledge workers and supportive partners<sup>3</sup>.

Therefore, on the inter-organizational level an important opportunity appears for every enterprise, namely to complete its own human capital by using human capitals of the outside worker teams and individual intellectual capitals of people who formally or informally cooperate with the firm. Taking this aspect into account is a serious developmental opportunity for every enterprise by, among others:

- gaining explicit knowledge,
- direct use of external partners' tacit knowledge,
- an opportunity to use the relationships of external partners with the environment,
- obtaining support by external talents,
- obtaining access to the partners' intellectual capital resources (e.g. information resources, customer capital, intellectual property rights),
- sharing knowledge and the joint creation of new knowledge resources (including innovations).

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<sup>3</sup> Compare: (Mikuła, 2012, pp. 19-20).



## MANAGING HUMAN CAPITAL OF AN ORGANIZATION

We can view human capital management at least from four different perspectives. Firstly, this management consists in the implementation of the management function (e.g. according to the following approach: planning, taking decisions, organizing, motivating, controlling) focused on human capital (discussed in the cross-section of all the four levels - Figure 1) in the way enabling the efficient achievement of the organization's goals and allowing to achieve high economic effectiveness. Secondly, it stands for regulating and dispositional proceedings aiming at the creation of an appropriate environment which will enable people the efficient use of human capital possessed by them, including the creation of the conditions for self-organization and self-management. Thirdly, it consists in the proper selection and use of organizational, technical, social, legal and economic and financial instruments on which the human capital management system is based and which the human capital management system uses. Fourthly, in the institutional sense, this management includes the system of positions and workers' teams (of the strategic, tactic and operating level) performing human capital management tasks.

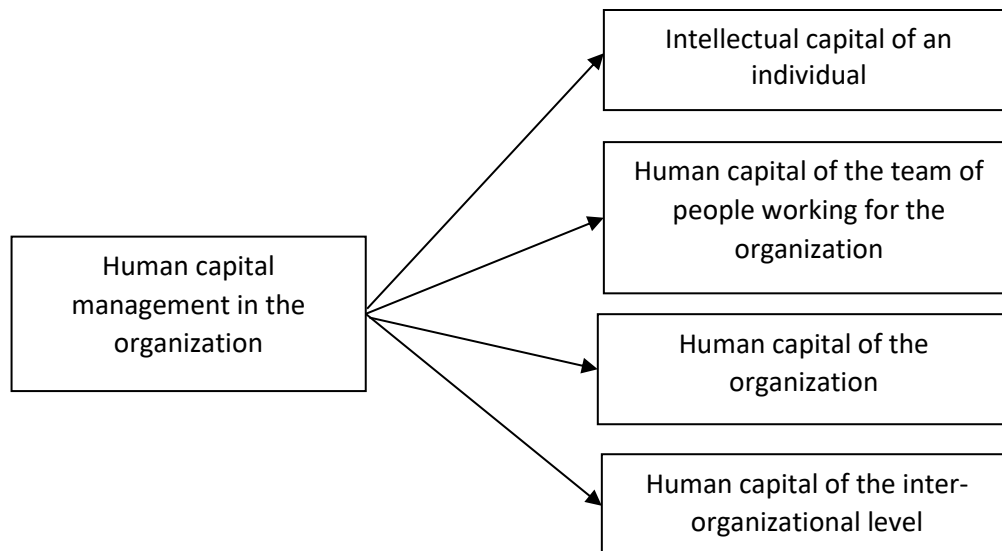


Figure 1. The levels of managing human capital of an organization  
Source: Author's own study

Obviously, human capital management is a broader concept than human resources management itself. It is a combination of tasks of knowledge-based management<sup>4</sup> and human resources management, or even better - of staff competence management alongside talent

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<sup>4</sup> In knowledge-based organizations, human capital management should be treated as a subsystem of the organization's knowledge-based management.

management. It also includes organizational capital management activities (treated as the infrastructure of human capital and relational activities (intra-organizational relations and the relations with the environment). All of the indicated scopes of management are closely connected and have shared areas of influence, which is the reason for which they should be actually agreed and linked (Figure 2).

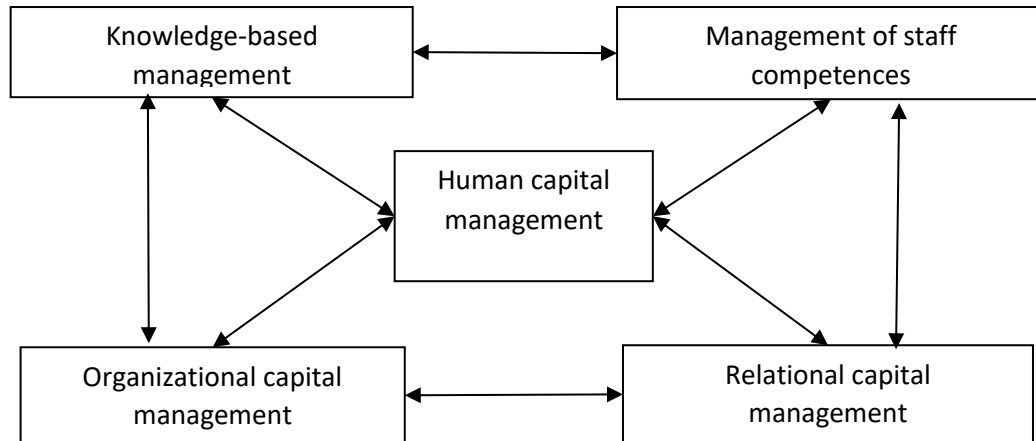


Figure 2. The basic areas of management integrated by human capital management  
Source: Author's own study

### THE DEVELOPMENT OF HUMAN CAPITAL OF AN ORGANIZATION

The development of human capital requires the consolidation of numerous activities in knowledge-based management, management of staff competences, organizational capital management and relational capital management. It should be also supported by initiatives in talent management and customer relationship management (CRM) and customer knowledge management (CKM). The activities have to be appropriately agreed on the indicated levels of human capital management and with reference to various groups of workers: knowledge workers, personnel, partners participating in the value creation process, as well as visionaries (differentiated with regard to the stage in the organization life cycle), considering their various talents (Figure 3). Therefore, the entirety of those initiatives requires to adopt a proper vision of human capital, human capital management strategy in agreement with the vision of knowledge and the enterprise knowledge-based strategy. While organizing human capital it is necessary to achieve the qualities of its matching, differentiation, adaptation, complementarity and redundancy. Motivating which aims at the creation of a suitable work environment, supported by the desired motivating stimuli is supposed to involve all groups of people working for the enterprise (including members of various type of communities, e.g. practitioners, cooperating with the enterprise) in work on the required (definitely also diverse) level.

Controlling requires, among others, making periodical assessments of the condition of enterprise human capital. The entirety of these actions translates into the necessity to incur financial investments.

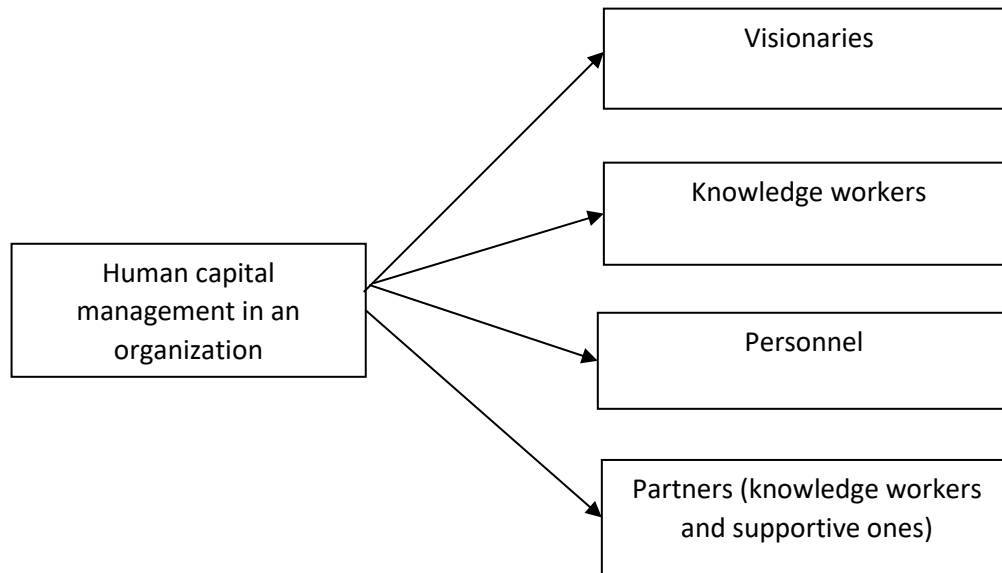


Figure 3. The concentration of human capital management of various groups of people working for the enterprise

Source: Author's own study

L. Edvinsson indicates the occurrence of a specific paradox. Investments in human capital and information technologies (IT) bring about the reduction of short-term profits, negatively influence the enterprise financial balance and lower its book value. In short, the paradox is that the more an enterprise invests in the modernization of knowledge and IT, the lower its value is (Edvinsson, 1997, p. 336). However, it is not an extraordinary phenomenon, and the lowering of the organization operation efficiency after introducing changes to it has been known for years and the theory of organizational changes takes it into account. Yet, it is necessary to remember about it in order to take proper “care” and keep the continuity of investment in human capital.

## CONCLUSIONS

Human capital management is a concept which will definitely arouse more and more interest of both theoreticians and practitioners. The application of human resources management in practice and supporting with initiatives in knowledge-based management is insufficient now. However, there are not firm theoretical solutions yet which would fully enable to use human capital being at enterprises' disposal. Obtaining them requires, among other things, a change in the way of theoreticians' and practitioners' thinking about management in

the conditions of crisis. Instead of focusing on minimizing losses and taking defensive actions, enterprises should rationalize their organization to increase their flexibility and adaptability to the changes undergoing in the environment and aim at capturing developmental opportunities. In order to make it possible, enterprises have to achieve the surplus of abilities, and this is only plausible via rational management and the full use of human capital.

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