

Serhiy I. Bay<sup>1</sup>, Anna M. Rozman<sup>2</sup>  
**HUMAN CAPITAL AS A FOUNDATION  
 FOR ENTERPRISE VALUE GROWTH**

*The article explores the ways of increasing the enterprise value to meet the needs of society through human factor activation. The authors also analyze the prerequisites for human resources capitalization and suggest an implementation algorithm for the value-based model of a company's human capital management.*

*Keywords: human capital; human resources capitalization; employees.*

*JEL classification: O15; G32.*

Сергій І. Бай, Анна М. Розман  
**ЛЮДСЬКИЙ КАПІТАЛ ЯК ФУНДАМЕНТ  
 ЗРОСТАННЯ ЦІННОСТІ ПІДПРИЄМСТВА**

*У статті обґрунтовано напрями підвищення цінності підприємства для задоволення потреб суспільства на основі активізації людського фактору, розглянуто передумови капіталізації людських ресурсів, запропоновано алгоритм реалізації ціннісно-орієнтованої моделі управління людським капіталом підприємства.*

*Ключові слова: людський капітал; капіталізація людських ресурсів; працівники.*

*Форм. 2. Рис. 5. Літ. 35.*

Сергей И. Бай, Анна М. Розман  
**ЧЕЛОВЕЧЕСКИЙ КАПИТАЛ КАК ФУНДАМЕНТ  
 РОСТА ЦЕННОСТИ ПРЕДПРИЯТИЯ**

*В статье обоснованы направления повышения ценности предприятия для удовлетворения потребностей общества на основе активизации человеческого фактора, рассмотрены предпосылки капитализации человеческих ресурсов, предложен алгоритм реализации ценностно-ориентированной модели управления человеческим капиталом предприятия.*

*Ключевые слова: человеческий капитал; капитализация человеческих ресурсов; сотрудники.*

**Problem statement.** Under globalized dissemination of advanced technologies and commoditization of resources, enterprise personnel is a great asset capable of continuous development and improvement. This is personnel with creativity, professionalism and mastery that achieves business success and economic growth. As the key business benefit, personal and professional competence of employees is the source of differentiation, distinguishing from competitors and ensuring customer loyalty (Becker, 1994; Porter, 1995). At the same time, contemporary research lacks attention to the issues of efficient human capital management, the thrust of which is staff development, improvement of economic activity of an enterprise and increase of its value for society.

**Recent research and publications analysis.** Vast majority of studies are dedicated to clarifying the role of human resources in ensuring the competitiveness of enterprises. They form theoretical and methodological foundations of the theory of human capital, prove positive impact of education, professional experience and skills on economic development of enterprises. Theoretical and applied aspects of human capital accu-

<sup>1</sup> Kyiv National Trade and Economics University, Ukraine.

<sup>2</sup> Kyiv National Trade and Economics University, Ukraine.

mulation and its evaluation tools in the workplace lack research on many aspects. Formation and development of human capital of companies are considered in the works of T. Schultz (1971), G. Becker (1994), P. Rastogi (2000), E. Mayo (2006), J. Fitz-Enz (2009). Employees' satisfaction and of their commitment to organization are reflected in the studies of G. Seijts and D. Crim (2006), N. Lockwood (2007), V. Macey and B. Schneider (2008). An important contribution to the development of research guidelines and factors determining companies success have been made by A. Brief (1984), I. Blank (1997), B. Berman and J. Evans (2003), Ch. Thomas and G. Heil (2005), S. Bay (2009), E. Pantano and H. Timmermans (2011), J. Belas et al. (2014), L. Fedulova (2014). However, a comprehensive study on constructing an effective system of human capital development, focused on maximizing enterprise's value as to society's needs, remains outside adequate attention of different scientific schools.

**The article aims to study** the ways of increasing enterprise's value for society through the implementation of the value-based management model.

To achieve this goal the following tasks are provided:

- identifying factors of HR capitalization;
- developing human capital management algorithm on the basis of the value-based approach.

**Key research findings.** The key drivers that motivate managers build and develop human capital are the following: the need to strengthen the competitive position under uncertainty, a focus on increasing the customer satisfaction level, and the lack of experts with specialized knowledge and skills necessary for effective functioning of an enterprise (Figure 1).

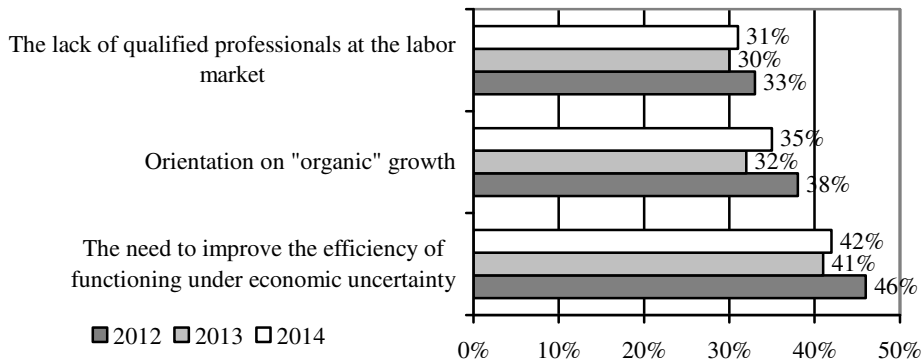


Figure 1. The main drivers of human capital development at enterprises, 2012–2014 (Lombardi and Laurano, 2012–2014)

Global trends in human capital development show that the most urgent tasks managers are facing today are to develop the leadership skills of employees, attract and keep highly qualified personnel and to optimize HR services (Figure 2).

The quality of human capital determines the company's capacity to achieve its objectives and significantly affects the market position. Specifically, efficiently organized system of human capital management improves such performance indicators as customer satisfaction, the share of loyal customers and revenue from sales (Figure 3).

Enterprises with an established system of human capital management (characterized by the following indicators: > 80% of loyal employees, availability of person-

nel reserve for > 70% of key positions and > 10% of loyal managers with personnel recruitment (Lombardi and Laurano, 2012–2014)) for the period of 2012–2014 reached significant growth of such indicators as the percentage of satisfied clients (at level +10–15% per year), the percentage of loyal customers (+10–11% per year) and income from sales (+8–9% per year). Those companies in which human capital management has not acquired sufficient development and had been satisfactory performed (characterized by the following indicators: < 30% of loyal employees, availability of personnel reserve for < 10% of key positions and lack of loyal personnel managers and lack of recruitment (Lombardi and Laurano, 2012–2014)) in the same period showed significantly lower dynamics of indicators, including the growth of the share of satisfied customers at level of 1–5% per year, increasing the number of loyal customers by 2% per year and income from sales at the level of 1–2% a year.

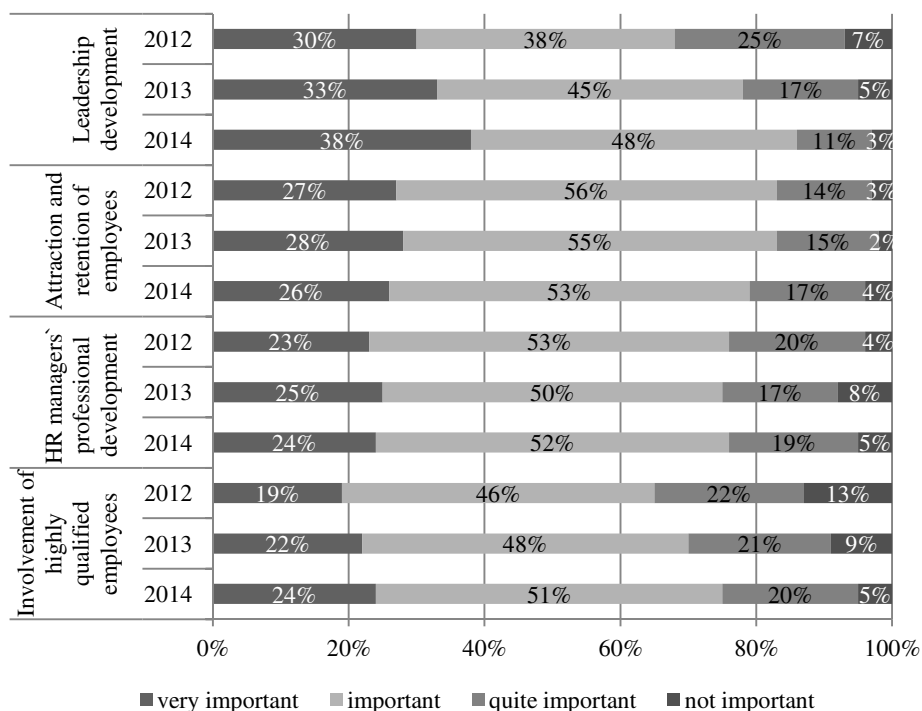


Figure 2. The most important tasks in human capital management, 2012–2014 (Adachi et al., 2012–2014)

It is important to distinguish between the concept of "human potential" as a possible factor of profit and "human capital", which is implemented through added value (Davydiuk, 2009; Stephanyshyn and Pits, 2010; Nikolaychuk, 2011). The capitalization of human potential occurs only when unique knowledge and skills creative thinking are used in business processes. The necessary prerequisites for HR capitalization is the availability of jobs and institutional environment that can let realize it in the form of goods or services, as well as an investment in human development. Under such conditions there has actualized the problem of conceptually new HR policy formation

transforming human potential into human capital. Human capital is an intangible asset of an enterprise, a valuable resource forming the aggregate value created by employees in accordance with their knowledge, skills and abilities. Employees are the carriers of unique knowledge, technologies, approaches, contacts with customers. And human action is the catalyst for the implementation of business processes (Figure 4).

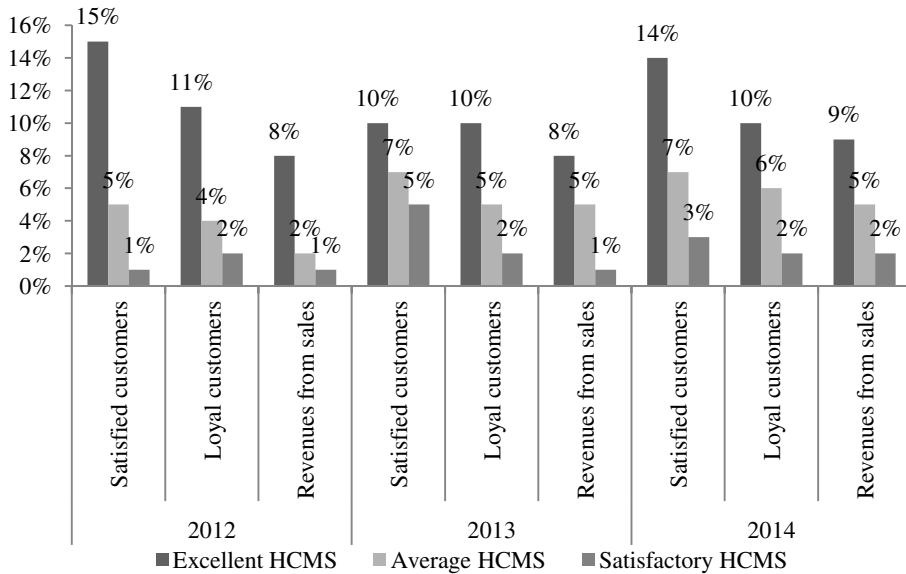


Figure 3. The relationship between the degree of development of company's human capital management system (HCMS) and the dynamics of key performance indicators (Lombardi and Laurano, 2012–2014)

Investments act as an important factor in the formation and development of human capital. Thus, as a result of investment in education, professional development and workers retraining, their innovative and creative activities a company receives a direct economic result that is quantifiable. But we cannot agree with the assertion that between investments in human capital and labor productivity level, there is only a direct link leading to profits growth. There are other factors affecting productivity and profitability. Among them the following can be named: the presence of certain congenital and acquired abilities of employees, the level of loyalty to their own development and enterprise, corporate culture, formation and validity of social motives in achieving the objectives of the work and prestige of particular work and profession, higher wage etc. It is quite difficult to quantify the impact of each of these factors in most cases, which is why, in order to minimize this impact, evaluative indicators should be chosen the way in which they may mostly assess the level of improving the quality and effectiveness of a separate employee directly resulting in investment into human capital (Zakharova and Potorochuk, 2012).

Thus, the estimation of investment effectiveness of human capital can be calculated as follows:

$$HCROI = \frac{R - (E - [P + B])}{P + B} \times 100\%, \tag{1}$$

where *HCROI* (*human capital return on investment*) is the recoupment factor of investments in human capital; *R* (*revenue*) means income, monetary unit; *E* (*expenses*) means expenses, monetary unit; *P* (*pay*) means wage costs, monetary unit; *B* (*benefits*) means cost on benefits, monetary unit (Fitz-Enz, 2009).

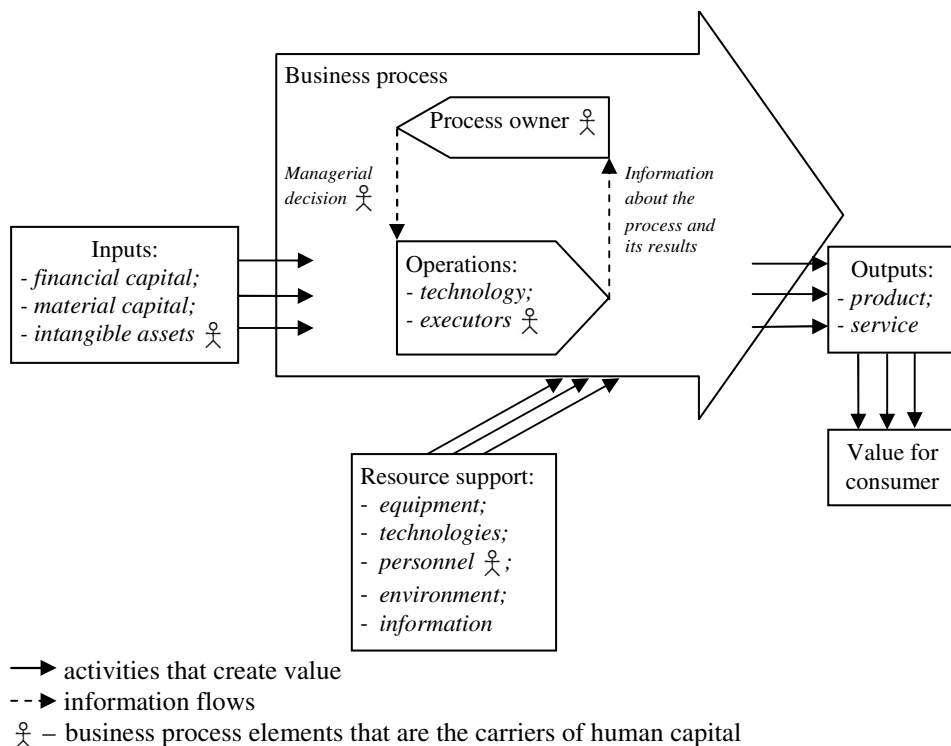


Figure 4. **Conceptual diagram of the business process,**  
adapted by the authors from (DSTU ISO 9001-2001)

20% is generally considered to be the minimum permissible level of the HCROI indicator. Reduction leads to a drastic reduction in the efficiency of investment in human capital, and even to complete loss of invested funds. For enterprises that for a long time have occupied a stable position at a market, the HCROI indicator level has to fluctuate within 100–150%. Enterprises using the strategy to expand market shares should focus on the level of HCROI indicator within 150–200% (Salyga, 2007).

The changing role of human capital, its transformation from cost-factor into the basic productive and social factor of economic growth led to the need to develop a new paradigm of managing its development. The development of management tools for accumulation and development of human capital of the company should be carried out using *the methodology of value-based management*. The thrust of value-based approach is to maximize enterprise value for key stakeholders interested in the results of its operation in the long term.

Today's economic success of any enterprise is impossible without timely and quality customer satisfaction, because whether the offer meets customer's value

expectations depends on the measure of the latter's satisfaction (Kotler, 1998). Focusing on customer satisfaction determines the need for the formation of high-quality consumer experience, a key role in the creation of which belongs to the human factor, skills and knowledge of workers, their creative thinking and their ability to generate innovative ideas. Under such conditions, human capital management, based on the value-based approach which is founded on measuring the individual value of each employee in accordance with the role one plays in creating enterprise's value, is one of the keys to increase the efficiency of its operations.

According to the authors, determining the individual value of an employee it is advisable to use a specially developed evaluation forms (tables-questionnaires, containing a list of competencies and individual employee objectives specifying the expected results). Depending on the position occupied by an employee, the size and type of business activity, a set of competencies and requirements may vary. It is necessary to use a differentiated approach to the assessment of both management and ordinary personnel. Managers of various levels should be evaluated according to the method of 360° (Zlenko, 2012). Discussion of grades, finalizing the results, making recommendations and identifying future orientations for employees should be carried out during the interview involving a supervisor and a representative of HR department (if available).

Final ranking score of an employee can be calculated according to the methodology of ABC-analysis, in which the ratio of major employee groups at the company are as follows: key employees – 20% of the total staff providing 80% of company's success; quite important workers – 70% of the total, providing enterprise's development by 15%; the least important workers – 10% of the total providing enterprise' 5% success (Kalyuzhna, 2012: 292). Based on this, qualitative grades are assigned to the following numerical values: "excellent" – 120 points, "good" – 100, "satisfactory" – 70, "not satisfactory" – 10. Accordingly, the final score that will characterize employee's value is calculated by the following formula:

$$Final\_score = \frac{120 \times E + 100 \times G + 70 \times S + 10 \times N}{E + G + S + N}, \quad (2)$$

where  $E$  means the number of grades "excellent";  $G$  means the number of grades "good";  $S$  – the number of grades "satisfactory";  $N$  – the number of grades "not satisfactory" (*authors' development*).

The received final points allow managers form employee's rating. Differentiation of company's personnel is conveniently fulfilled using this grading, which is the evaluation and ranking of employees by to their value to the enterprise depending on the skill level, experience, skills and professional competence (Lozovskiy, 2009). The number of grades is determined by company's management in sole discretion. According to the authors, separation of 3 grades, namely: key employees (20%), important (70%) and least important workers (10%) is optimal for medium-sized enterprises. Belonging of an employee to a grade determines its remuneration scheme, which in its turn promotes motivation and staff development. The basis for effective application of the value-based approach to human capital management is understanding the determinants of employee's value. The key factors determining the value of an employee and demanding managerial attention are the fol-

lowing: innate ability, experience, knowledge and skills, personal motivation. Managing these key characteristics should become the basis of human capital management of a company.

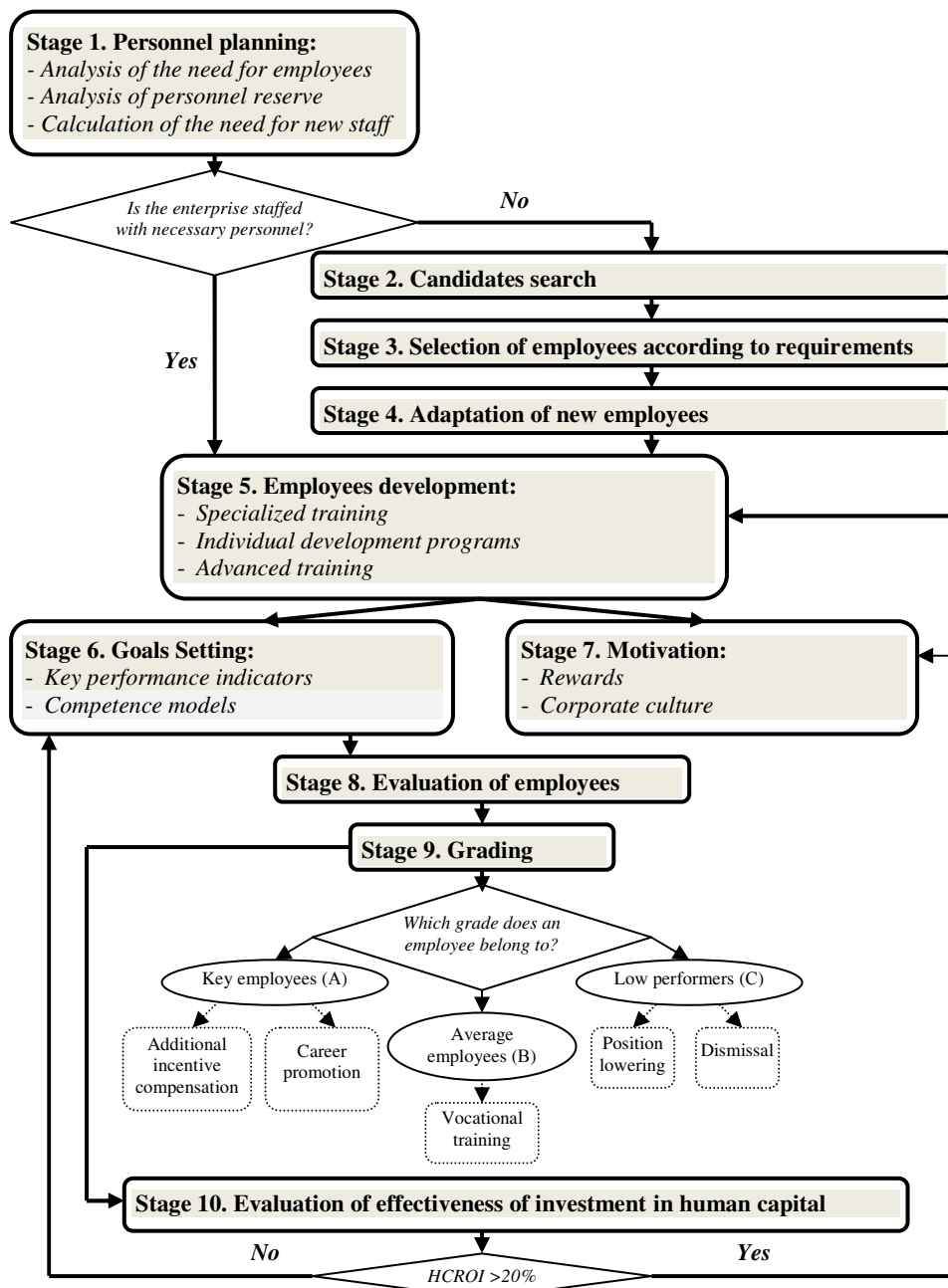


Figure 5. Algorithm of enterprise's human capital management, authors' development

Figure 5 presents the management algorithm of human capital of a company on the basis of the value-based approach, which involves measuring the individual value of each employee and activities of capacity, which will ultimately improve the enterprise efficiency as a whole.

The initial phase of human capital management is to examine the staffing needs of an enterprise, in which they have solved the problem of providing with workforce of required quantity and quality. In case of staff shortage for certain functional direction, search and attraction of appropriate workers from the labor market occur. Enterprise with an effective employer's brand usually receives offers of the best candidates. If the image of a company as an attractive place of work is not developed, investments in search of highly qualified specialists significantly increase. After hiring a new employee to the position, the process of adaptation, i.e. adapting to the content, working conditions and social environment, takes place.

Effective operation of business is largely determined by the degree of its staff development. In this regard, an important step in enterprise's human capital management is to develop specialized knowledge of workers, necessary skills and abilities allowing to improve productivity and perform functional duties most efficiently.

As the main purpose of enterprise's human capital management is to maximize enterprise's value in the long term, the necessary condition to achieve planned goals is to establish goals for employees in compliance company's strategy. To assess personal performance of each employee and to focus staff on achieving necessary results is possible with the use of KPI (Key performance indicators) (Klochkov, 2010) and competence models (Spencer and Spencer, 2005). Since the value of each employees for an enterprise is not the same, the next important step in human capital management is to measure the individual value of all employees. Assessment results allow forming staff rating and identifying promising areas for human capital management, financial incentives and career advance opportunities of key employees, training and qualification improvement, and also timely detection as well as dismissal of the least valuable workers.

The final stage of employees' management is to evaluate the effectiveness of investments in human capital. If the cost of attraction and developing employees provide the growth of company's key performance indicators, it is necessary to direct the funds received for additional financial incentives, as well as to maintain and improve the corporate culture of the company, which will further increase the value of the company. In the case when investments in human capital do not bring the desired effect, it is necessary to carefully analyze and correct the model of competencies and key performance indicators of employees.

Operating company's human capital management according to this scheme will help achieve the competitive advantages and maximize enterprise's value in the long run by attracting highly skilled professionals, remuneration optimization and maintaining a high level of workers' motivation.

**Conclusions and recommendations for further research.** The key factor in enterprise success is the efficient use of labor capacity of employees promoting turnover growth, customer satisfaction and commercial success. Experienced, highly qualified staff that fully meet the requirements and objectives of the company, is a long-term strategic competitive advantage and the key to effective activity. The quality of per-



sonnel is one of the main factors determining the pace of enterprise development, the level of customer service and the increase of enterprise's value as a whole.

Economic and demographic manifestations of contemporary Ukrainian society and international experience in the field of effective personnel management determine the need for the value-based approach to company's personnel management with a special emphasis on individual employee's value and investing in human capital.

Determinants of employee's value (abilities, experience, knowledge, skills, personal motivation) shape the algorithm of company's human capital management by the following steps: workforce planning; if necessary – search, selection and adaptation of new staff; development and training of employees; setting individual goals contributing to implementing company's strategy; motivation and stimulation of labor; evaluation of the degree of compliance of employees' work, their knowledge and skills with expected requirements; ranking of employees according to their value to company; identifying promising areas for human capital management for each grade; evaluation of investment efficiency in human capital.

The value-based approach to human capital management is an effective tool of differentiating the company in a dynamic competitive environment, which contributes to maximizing its value in the long term. Further research, according to the authors, should be aimed at finding innovative methods to increase the value of human capital of a company.

#### **References:**

- Бай С.І.* Розвиток організації: політика, потенціал, ефективність: Монографія. – К.: Київ. нац. торг.-екон. ун-т, 2009. – 280 с.
- Берман Б., Эванс Дж.* Розничная торговля: стратегический поход. – М.: Вильямс, 2003. – 1184 с.
- Бланк И.А.* Торговый менеджмент. – К.: Украинско-Финский институт менеджмента и бизнеса, 1997. – 408 с.
- Давидюк Т.В.* Трудові ресурси, трудовий потенціал, робоча сила, люський капітал: взаємозв'язок категорій // Вісник ДЖТУ.– 2009.– №1. – С. 32–37.
- Державний стандарт України ДСТУ ISO 9001-2001 – Системи управління якістю: Вимоги. – К.: Держстандарт України, 2001. – 33 с.
- Захарова О.В., Поторочин С.О.* Методи оцінки інвестування у людський капітал // Ефективна економіка.– 2012.– №4 // [www.economy.nayka.com.ua](http://www.economy.nayka.com.ua).
- Зленко А.М.* Оцінка працівників методом «360 градусів» // Збірник наук. праць Переяслав-Хмельницького держ. пед. ун-ту ім. Григорія Сковороди.– 2012.– Вип. 18/1 // [masters.donntu.org](http://masters.donntu.org).
- Калюжна Н.Г.* Матриця диференціації управлінського персоналу як орієнтир для визначення стратегічних працівників у системі управління підприємством // Маркетинг і менеджмент інновацій.– 2012.– №4. – С. 289–298.
- Клочков А.К.* КРІ і мотивація персонала. Полный сборник практических инструментов. – М.: Эксмо, 2010. – 103 с.
- Котлер Ф.* Маркетинг менеджмент. – СПб.: Питер Ком, 1998. – 896 с.
- Лозовський О.М., Таран О.А., Таран В.С.* Впровадження системи грейдингу на вітчизняних підприємствах // Вісник Національного університету «Львівська політехніка».– 2009.– Вип. 647. – С. 591–596.
- Ніколайчук М.В.* Трагування людського капіталу в системі сучасних парадигмальних пріоритетів розвитку // Збірник наукових праць НУК.– 2011.– №2. – С. 150–155.
- Салига К.С.* Ефективність реальних інвестицій: Монографія. – Запоріжжя: ГУ ЗІДМУ, 2007. – 284 с.
- Стефанишин О., Пиц В.* Особливості змісту категорії «людський потенціал» в умовах розвитку інноваційної економіки України // Галицький економічний вісник.– 2010.– №3. – С. 161–169.

- Федулова Л.И.* Особенности сценария прорывной технологической политики в Украине // Science and World: International scientific journal.— 2014.— №2, Vol. II. — P. 91–94.
- Adachi, B., Gretzcko, M., Pelster, B.* (2013). Human Capital Trends 2013: Leading indicators. N.Y.: Deloitte. — 28 p.
- Adachi, B., Helfrich, D., Gretzcko, M., Schwartz, J.* (2012). Human Capital Trends 2012: Leap ahead. N.Y.: Deloitte. 32 p.
- Belas, J., Bartos, P., Habanik, J., Novak, P.* (2014). Significant Attributes of the Business Environment in Small and Medium-Sized Enterprises. Economics and Sociology, 7(3): 22–39.
- Becker, G.* (1994). Human Capital: Theoretical and Empirical Analysis, with Special Reference to Education. University of Chicago Press. 412 p.
- Brief, A.* (1984). Managing Human Resources in Retail Organizations (Advances in retailing series). Lanham: Lexington Books. 184 p.
- Fitz-Enz, J.* (2009). The ROI of Human Capital: Measuring the Economic Value of Employee Performance. N.Y.: Amacom. 336 p.
- Lockwood, N.R.* (2007). Leveraging Employee Engagement for Competitive Advantage: HR's Strategic Role. SHRM Research. 12 p.
- Lombardi, M., Laurano, M.* (2012). Human Capital Management Trends 2012: Managing Talent to Lead Organizational Growth. Boston: Aberdeen Group. 28 p.
- Lombardi, M., Laurano, M.* (2013). Human Capital Management Trends 2013: It's a Brave New World. Boston: Aberdeen Group. 25 p.
- Lombardi, M., Laurano, M.* (2014). Human Capital Management Trends 2014: Developing a Critical Eye for Talent. Boston: Aberdeen Group. 27 p.
- Macey, W.H., Schneider, B.* (2008). The Meaning of Employee Engagement. Industrial and Organizational Psychology, 1: 3–30.
- Mayo, A.* (2006). The Human Value of the Enterprise: Valuing People as Assets – Monitoring, Measuring, Managing. Boston: Nicholas Brealey International. 307 p.
- Pantano, E., Timmermans, H.* (2011). Advanced Technologies Management for Retailing: Frameworks and Cases. Hershey: IGI Global. 408 p.
- Porter, M.* (1995). Competitive advantage: Creating and sustaining superior performance. New York: Free Press. 576 p.
- Rastogi, P.N.* (2000). Sustaining enterprise competitiveness – is human capital the answer? Human Systems management, 19: 193–203.
- Schultz, T.* (1971). Investment in Human Capital: the Role of Education and of Research. N.Y.: Free press. 62 p.
- Seijts, G.H., Crim, D.* (2006). What engages employees the most or, The Ten C's of employee engagement. Ivey Business Journal, pp. 2–7.
- Spencer, L.M., Spencer, S.M.* (2005). Models for Superior Performance. N.Y.: John Wiley & Sons. 371 p.
- Stephan, M., Vadhat, H., Walkinshaw, H., Walsh, B.* (2014). Global Human Capital Trends 2014: Engaging the 21st-century workforce. N.Y.: Deloitte. 151 p.
- Thomas, Ch., Heil, G.* (2005). Employee Management and Customer Service in the Retail Industry. N.Y.: Wiley. 208 p.

Стаття надійшла до редакції 30.06.2015.