

UDC 339.97: 334.72

JEL: F2, F3, H2, O2

## ANALYSIS OF HUMAN-CAPITAL DEVELOPMENT TOOLS IN INSURANCE COMPANIES

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**Introduction.** The urgent task of modern corporate governance is to use innovative tools to develop the knowledge economy, where the primary source of wealth is human capital. A critical factor in the development of human capital in the new pandemic environment is to ensure the efficiency of staff to achieve commercial goals under any conditions of a sharp change in quarantine restrictions. The search for new tools for human capital development in insurance companies is an urgent and objective need. It will strengthen the competitive advantages of insurance companies in the face of such global challenges and threats as a pandemic.

**Aim and tasks.** The article aims to determine the role and importance of tools for human capital development, to find new ways to improve them, taking into account the trends of pandemic waves. The following main tasks are 1) to explore the essence of existing tools for human capital development; 2) to establish the relationship between the use of appropriate tools for human capital development in the context of the spread of the COVID-19 pandemic; 3) propose approaches to the use of human capital development tools to qualitatively and quantitatively increase the competitiveness of insurance companies.

**Results.** The article examines the essence of existing tools for human capital development at the macro and micro levels. The essence of outsourcing, outstaffing, personnel leasing, crowdsourcing, coworking, freelancing is analyzed. The relationship between the use of appropriate tools for human capital development in the context of the spread of new waves of the COVID-19 pandemic and the effectiveness of insurance companies is established. Approaches to using human capital development tools to qualitatively and quantitatively increase insurance companies' competitiveness are proposed.

**Conclusions.** The paper defines the role and importance of such tools for human capital development as outsourcing, outstaffing, staff leasing, crowdsourcing, coworking, freelancing. Ways to improve them, taking into account the trends of pandemic waves, are proposed. A direct relationship between applying the tools of human capital development in the new waves of the COVID-19 pandemic and the effectiveness of insurance companies is established. It is proposed to use the analyzed tools to qualitatively and quantitatively increase the competitiveness of insurance companies.

**Keywords:** human capital, COVID-19 Pandemic, insurance companies, outsourcing, outstaffing, staff leasing, crowdsourcing, coworking, freelancing.

**Received:** April 12, 2021

**Accepted:** June 03, 2021

DOI:10.31520/2616-7107/2021.5.2-5

УДК 339.97: 334.72  
JEL: F2, F3, H2, O2

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**Отримано:** 12 квітня, 2021

**Прийнято:** 03 червня, 2021

DOI:10.31520/2616-7107/2021.5.2-5

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**АНАЛІЗ ІНСТРУМЕНТІВ РОЗВИТКУ ЛЮДСЬКОГО  
КАПІТАЛУ В СТРАХОВИХ КОМПАНІЯХ**

**Вступ.** Актуальним завданням сучасного управління компаніями є використання інноваційних інструментів розвитку економіки знань, де головним джерелом багатства є людський капітал. Ключовим фактором розвитку людського капіталу в нових пандемічних умовах є забезпечення ефективності роботи персоналу з метою досягнення поставлених комерційних цілей за будь-яких умов різкої зміни карантинних обмежень. Пошук нових інструментів розвитку людського капіталу в страхових компаніях є актуальною та об'єктивною потребою. Це дозволить зміцнити конкурентні переваги страхових компаній в умовах існування таких глобальних викликів та загроз як пандемія.

**Мета і завдання.** Метою статті є визначення ролі та значення інструментів розвитку людського капіталу, пошук нових способів їх вдосконалення з урахуванням тенденцій поширення хвиль пандемії. Для досягнення цієї мети слід вирішити наступні основні завдання: 1) дослідити суть існуючих інструментів розвитку людського капіталу; 2) встановити взаємозв'язок між застосування відповідних інструментів для розвитку людського капіталу в умовах поширення пандемії COVID-19; 3) запропонувати підходи щодо використання інструментів розвитку людського капіталу для якісного та кількісного підвищення конкурентоспроможності страхових компаній.

**Результати.** У статті досліджено суть існуючих інструментів розвитку людського капіталу на макро- та мікрорівнях. Проаналізовано сутність понять аутсорсинг, аутстафінг, лізинг персоналу, краудсорсинг, коворкінг, фрілансінг. Встановлено взаємозв'язок між застосування відповідних інструментів для розвитку людського капіталу в умовах поширення нових хвиль пандемії COVID-19 та результативністю страхових компаній. Запропоновано підходи щодо використання інструментів розвитку людського капіталу для якісного та кількісного підвищення конкурентоспроможності страхових компаній.

**Висновки.** У роботі визначено визначення ролі та значення таких інструментів розвитку людського капіталу як аутсорсинг, аутстафінг, лізинг персоналу, краудсорсинг, коворкінг, фрілансінг. Запропоновано шляхи їх вдосконалення з урахуванням тенденцій поширення хвиль пандемії. Встановлено, що між застосування досліджуваних інструментів розвитку людського капіталу в умовах поширення нових хвиль пандемії COVID-19 та результативністю страхових компаній існує безпосередній взаємозв'язок, запропоновано використовувати проаналізовані інструменти для якісного та кількісного підвищення конкурентоспроможності страхових компаній.

**Ключові слова:** людський капітал, пандемія COVID-19, страхові компанії, аутсорсинг, аутстафінг, лізинг персоналу, краудсорсинг, коворкінг, фріланс.

**Introduction.** With the advent of the COVID-19 pandemic crisis in employee management, competition between companies has shifted to human capital. Today there is an urgent problem of finding new tools for human capital development as a critical driver of the economic growth of companies. The urgent task of modern corporate governance is to use innovative tools to develop the knowledge economy, where the primary source of wealth is human capital. A critical factor in the development of human capital in the new pandemic environment is to ensure the efficiency of staff to achieve commercial goals under any conditions of a sharp change in quarantine restrictions.

In today's environment, domestic insurance companies have to compete in a complex, competitive environment due to many factors, including globalization challenges, technological gap, and the rapid spread of Internet technologies due to the rapid development of the knowledge economy. Undoubtedly, for insurance companies, the most changes took place in the first half of 2020. With the increasing uncertainty of the environment in connection with the COVID-19 pandemic, adaptive approaches to human resource management are becoming more relevant. This ongoing crisis has a profound effect on all areas of our lives. It changes the attitude towards human resources and increases their value for insurance companies, as it is the most crucial factor in ensuring their productive functioning. The search for new tools for human capital development in insurance companies is an urgent and objective need. It will strengthen the competitive advantages of insurance companies in the face of such global challenges and threats as a pandemic.

**Analysis of recent research and publications.** In essence, the category of "human resources" is an integral concept and includes both the labor resources of the enterprise (the working-age population, as well as working adolescents and working retirees) and employees of individual organizations.

American economists G. Becker [1], H.R. Bowen [2], T. Schultz [3], and L. Thurow [4] are the founders of the theory of human capital. They were the initiator, popularizer, and developer of human capital ideas in the

world. In Ukraine, E. Libanova [5] investigates vital features of labor migration, Y. Matseliukh et al. [6] study the basic principles of human capital theory. O. Kuzmin et al. [7] classify the innovative development of human capital. A socio-legal aspect of human capital development in the global competition was analyzed in the works [8-10]. Theoretical and methodological approach to interpreting role leadership abilities in the context of human capital development was considered by the author in [11, 12]. A. Polyanin, T. Golovina, I. Avdeeva, and Y. Vertakova, in their paper [13], noted the specificity of human capital in the conditions of digital transformation of business organizations.

Scientists from different points of view have studied the problem of human capital. The authors' approach is original [14, 15] by assessing losses, damage, and losses caused at the macro-level to the economy, population, and nature by man-made effects.

The tools of the competitiveness increase of the enterprise there are outsourcing [16, 17]. Research into developing the peculiarities of use outstaffing to ensure the stable development of organizations and freelance as a developing form of modernization of economic activity is becoming relevant [18-21]. In addition, coworking is becoming a promising direction in the modern economy [22, 23], and educational coworking is a new format for organizing the educational space of additional professional education [24, 25]. Crowdsourcing proved to be an effective tool and social technology, which required further study and its application in marketing activities and a way to optimize the functioning of enterprises [26, 27].

The most significant contribution to the study of tools of human-capital development mechanisms of enterprises and its efficiency was made by in the market of entrepreneurial education services [28-30], passenger transport system [31, 32].

At the present stage of economic development, many scientific and methodological works on the analysis of human-capital development tools are devoted. However, there is no research on the human-capital development tools in insurance companies.

**Aim and tasks.** The article aims to determine the role and importance of tools for human capital development, to find new ways to improve them, taking into account the trends of pandemic waves. We should solve the following main tasks: 1) to explore the essence of existing tools for human capital development; 2) to establish economic and mathematical patterns of the application of appropriate tools for human capital development in the context of the spread of the COVID-19 pandemic; 3) to offer a set of recommendations on the use of human capital development tools to qualitatively and quantitatively increase the competitiveness of insurance companies.

**Results.** Insurance companies provide services through the use of their (available) human capital. Therefore, the development of the human capital of insurance companies is, in essence, an increase in profits, which indicates a directly proportional relationship between increasing human capital and increasing profits. The state plays a significant role in creating a mechanism for the reproduction of human capital. The main stages of development of human capital are its formation, distribution, use, and accumulation. The effectiveness of the mechanism depends on the existence of an appropriate institutional structure and tools. That ensure the development of quantitative and qualitative characteristics of human capital (legal institutions, a set of policies on social, demographic, migration and environmental development, multilevel and vocational education, health care institutions, etc.).

The tools of human capital development at the macro level should include: established economic, social, environmental standards and norms (subsistence level, minimum wage, taxes, fines, benefits), licensing and quota system, a set of subsidies, subventions, etc. [33-34].

In [35, 36], the green regulation mechanisms are proposed, where the key role is given to human capital and so on. The main tools for the formation and development of human capital at the micro-level are [7, 9, 24, 25, 29]: 1) the existing system of professional development (licenses, accreditations, educational and professional programs, dual education, business education, innovative forms and methods of training); 2) modern tools of personnel management: corporate universities,

information systems of computerized learning (systems and forms of distance, virtual learning, online courses, simulation systems, Internet knowledge resources). The new forms and types of employment the authors [37-49] include (outsourcing [37-39], outstaffing [40-42], staff leasing [43], freelance [44], coworking [45-46], crowdsourcing [47-49]).

O.I. Mykalo [37] explores the term outsourcing. It consists of three English words "outside resource using" - the use of external resources. Some authors [16, 17] consider outsourcing as a process of transferring some secondary functions to reduce the costs of companies, which took place in the initial stages of outsourcing. Other authors [28, 30] consider outsourcing in the context of mutually beneficial cooperation for the customer and the provider of outsourcing services based on specialization and cooperation. Another group of authors describes outsourcing business processes, the long-term strategic nature of the relationship between the customer and the service provider. Still, it emphasizes the role of outsourcing as a model of company management. O.I. Mykalo [37] suggests identifying outsourcing as a tool to achieve a competitive advantage related to the need to focus on the core business. O. Gavrilyuk [38] considers that outsourcing is an organizational solution that optimizes the configuration of the business system based on the parameters of quality-cost-ownership. At the same time, the author points to the process where outsourcing is borrowing from the outside.

Outstaffing, which is formed from two words out and staffing, means the existing definition of staffing service. It is a commercial or civil agreement, according to which a person providing a service (resident or non-resident) sends another person (resident or non-resident) to one or more individuals to perform the functions specified in this agreement [40]. O. Grishnova and O. Zaichko [41] consider outstaffing a kind of non-standard employment of employees who have informal jobs in formal sector enterprises. According to O.V. Pisarchuk [42], outstaffing is the removal of personnel from the staff of the customer's enterprise with its subsequent registration in the staff of the executing company. At the same time, the latter assumes full legal and financial responsibility for employees.

In the works [43-44], the authors claim that a freelancer is an independent, highly qualified professional who is not part of the organization's staff and traditional labor relations but independently sells his services in the market without being a single-contract subcontractor.

The American researchers T.W Malone and R. Laubacher [45] introduced the unique term "e-lancer" (electronic freelancer), i.e., carrying out his work at a distance using information and communication technologies. Authors [45] define coworking as a working model in which participants, while remaining independent and free, use the shared space for their activities.

According to [46], coworking is a complex social phenomenon. Coworking is an open-plan office where mobile, independent knowledge workers share jobs [46]. But coworking is usually defined because more than

access to space and objects, it is the elusive quality of this behavior to work independently is a source of growing attractiveness to participants, attention to commentators and intrigue for scientists" [47].

The term crowdsourcing was coined by Jeff Howe and Mark Robinson for a combination of crowd and sourcing in 2005 [48]. According to [49], crowdsourcing groups of people work for free to create a program and then share the results of their work on the Web.

G.M. Kalinina [50] believes that crowdsourcing is a sophisticated way to delegate to a remote community of users to solve business problems or vital tasks through the Internet, which is seen as an environment and social tool for effective communication.

Employed population by type of economic activity in 2015-2020 (aged 15-70 years; thousand people and % to total employed) [51-55] are presented in Table. 1.

**Table 1. Employed aged 15 years and over to 70 years by type of economic activity in 2015-2020 (thousand people and % to total employed)**

<i>Indexes</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>
<b>Total</b>	<b>16443,2</b>	<b>16276,9</b>	<b>16156,4</b>	<b>16360,9</b>	<b>16578,3</b>	<b>16543,2</b>
Agriculture, forestry and fishing	17,5%	17,6%	17,7%	18,0%	18,2%	16,1%
Manufacturing	15,7%	15,3%	15,1%	14,8%	14,8%	13,1%
Construction	3,9%	4,0%	4,0%	4,1%	4,2%	3,9%
Wholesale and retail trade; repair of motor vehicles and motorcycles	21,4%	21,6%	21,8%	22,3%	22,9%	21,2%
Transportation and warehousing, postal and courier activities	6,1%	6,1%	6,1%	6,1%	6,0%	9,7%
Accommodation and food service activities	1,7%	1,7%	1,7%	1,7%	1,8%	1,7%
Information and communication	1,7%	1,7%	1,7%	1,7%	1,7%	1,6%
Financial and insurance activities	1,5%	1,4%	1,3%	1,3%	1,3%	1,5%
Real estate activities	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%
Professional, scientific and technical activities	2,6%	2,6%	2,6%	2,7%	2,5%	2,6%
Administrative and support service activities	1,8%	1,9%	1,8%	1,9%	1,9%	1,8%
Public administration and defence; compulsory social security	5,9%	6,0%	6,1%	5,7%	5,3%	5,9%
Education	9,1%	8,9%	8,8%	8,7%	8,4%	9,0%
Human health and social work activities	6,3%	6,3%	6,3%	6,1%	5,9%	6,3%
Arts, sport, entertainment and recreation	1,3%	1,2%	1,2%	1,2%	1,2%	1,3%
Other service activities	2,1%	2,1%	2,1%	2,2%	2,2%	2,7%

*Source: built by the authors based on the data [51-55]*

During quarantine of the COVID-19 pandemic in March 2020 in Ukraine, the services sector of the national economy was reduced to 29% due to restrictions by public authorities. It did not affect market conditions, so after the removal of quarantine restrictions according to the State Statistics Service of Ukraine in general in the following economic activities: wholesale and retail trade, repair of motor vehicles and motorcycles, temporary accommodation and catering, financial and insurance activities, operations With real estate, arts, sports, entertainment and recreation, the number of employed population recovered to 36.9% of the total population of Ukraine

employed in the national economy (Table 1).

Compared to Europe, America, and Russia, the consequences of the COVID-19 epidemic in Ukraine had an unexpected impact and significant changes in the labor market structure. It has led to a sharp decline in business activity in economic activities that directly provide services or sell goods to the public, has reduced the income of businesses and employees in related sectors of business.

The effectiveness of insurance economic activity is characterized by various factors that must be considered to influence the income and expenditure of the economic activity (Table 2) [5].

**Table 2. Indicators that characterize the tools of human capital development**

<i>Indexes</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>
Number of Ukrainian outsourcing companies in the top 100 companies in the world, unit	10	12	18	16	21
Total of coworking spaces, unit	24	81	125	137	103
The total area of flexible offices, thousand square meters	16	45	89	130	95

*Source: created by authors based on data [56-58].*

According to a study [56], there are 125 coworking spaces in the country. The total area of flexible offices in Ukraine exceeded 130 thousand square meters. m, with two-thirds of the proposal, 89 thousand square meters, accounted for in Kyiv. For eight years of development, coworking and flexible offices have already managed to share 4.5% of office real estate in the capital. There is a growing interest in this segment throughout Ukraine [56].

The insurance sector is one of the most sensitive sectors in the labor market. On the one hand, insurance companies constantly need full-time employees and agents. On the other hand, in the post-crisis years, starting in 2008, insurance companies-employers feel very unstable in the market. It is reflected in two indicators – the number of full-time employees and the number of wages.

The pandemic crisis of 2020 has negatively affected the insurance sector. Market stagnation and competitive pressure have forced insurers to optimize costs and increase efficiency, which was reflected in a sharp reduction in the staff of insurance companies (12%) and agency network (~ 21%) in 2020 compared to 2019 [57-60]. In general, for the last period of 2021, risky insurance companies have reduced staff reductions and are trying to introduce new forms

of work with employees. Life insurance companies even increased by 1.6%.

The practical significance of the obtained results lies in the analysis of publications on conceptual approaches to the formation of tools for the human capital development of insurance companies. The obtained results are of great practical importance and create conditions for solving a significant scientific and practical problem of ensuring sustainable human development, which is the goal and essence of the functioning of the national economy.

**Conclusions.** In the work to study the human-resource development tools, the following conclusions can be drawn:

1. The role and importance of such tools for human capital development as outsourcing, outstaffing, staff leasing, crowdsourcing, coworking, freelancing have been defined.

2. Ways to improve them, taking into account the trends of pandemic waves, are proposed.

3. It is established that there is a direct relationship between the application of the studied tools of human capital development in the new waves of the COVID-19 pandemic and the effectiveness of insurance companies; it is proposed to use the analyzed tools to qualitatively and quantitatively increase the competitiveness of insurance companies.

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