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CONTEMPORARY CHALLENGES IN EDUCATION

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Oleksandr HORBAN*

THE PROBLEM OF THE QUALITY OF HIGHER EDUCATION IN THE CONTEXT OF KNOWLEDGE MANAGEMENT

The central problem of reforming higher education is to improve its quality. On the website of the Ministry of Education and Science of Ukraine, 'quality of education' is defined as "a set of characteristics of the educational process, which determines the consecutive and practically efficient form of competence and professional knowledge".

In modern research, education is regarded as a behavioral model. For example, in the study "The regulatory functions of education in behavioral models"², the authors investigated three key education functions: formative, developmental and stabilizing. The regulatory functions of education allow considering the development of an individual, family and society as a behavioral model. Modeling of education, ranging from individual education to the educational policy of the country, opens up the possibility of implicating modern management theories and approaches into the educational process. Any managerial model that has proven to be effective in production finds application in the management of education institutions.

Education is regarded in modern theories as a behavioral model, which uses managerial models that have proven their effectiveness. Therefore, the reform of the quality of education essentially means a change in the managerial model in education. It affects the functions of education and the entire behavioral model of the neurobiological and social system. The implications of a new managerial model in education can lead to the crisis of personality identity³. For this reason, the quality

¹ Ministry of Education and Science of Ukraine, 2019, https://mon.gov.ua/ua/ tag/yakist-osviti [10.09.2021].

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² O. Horban, O. Kravchenko, R. Martych, N. Yukhymenko, *The regulatory functions of education in behavioral models*, "Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu" 2019, no. 3, pp. 152-157.

³ S. Balinchenko, *Mythologeme-Related Crisis of Identity: Reality and Fictional Markers of Alienation*, "Future Human Image" 2019, no. 11, pp. 5-13; Z. Kieliszek, *National Identity as an Important Topic of the Research of the Man in the Future: "Opening"*

of education and the meanings implied by this phrase acquire special significance. They determine the functions of education, i.e. management model in education, which forms the basis of human and society behavior.

Considering the definition of 'quality of education' of the Ministry of Education and Science of Ukraine, the following can be found out: it "(...) determines the consecutive and practically efficient form of competence and professional knowledge"⁴, that clearly reveals the only meaning. This phrase indicates the choice of direction of management reform, or a certain sequence of actions aimed at building competencies and transferring certain professional knowledge.

Educational policy of the leading countries of the world, especially in the direction of changing the 'quality of education', i. e. management in educational models, is determined by the programs, regulations and legal documents adopted by the Educational, Scientific, and Cultural Organization (UNESCO). These are the directives of this organization that are the basis for a variety of international educational forums, such as Global National Education Leadership Summit, Higher Education Forum, K12 Education, International Education, Quality and Specialty Education, Online Education, Preschool Education Forum, and others. These forums are platforms for discussing the features of implications of management models in education and science, as well as their use as a nominal or real force in the educational policy of countries⁵.

The term 'quality of education' used by the Ministry of Education and Science of Ukraine, and in accordance with which it implements the reforms of the management of higher education institutions, does not convey the true scale of modern modeling of the educational process. In addition, the term does not reveal the true capabilities of management models that are used in modeling the educational process.

In the educational policy of the world's leading countries, the quality of education as well as the reform of higher education management is defined by another term – 'total quality management'. The implications of this term in educational policy provides for reforming the management of higher education institutions based on international experience.

The implications of total quality management in educational management began at the end of the twentieth century. They involved the

the Potential of the Fichtean an Concept of National Identity, "Philosophy and Cosmology" 2018, no. 20, 83-91.

⁴ Ministry of Education and Science of Ukraine, 2019, https://mon.gov.ua/ua/tag/yakist-osviti [10.09.2021].

⁵ O. Horban, T. Kuprii, R. Martych, L. Panasiuk, *Implications of total quality management in Ukrainian higher education institutions: international experience*, "Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu" 2020, no. 2, pp. 126-130.

creation and implementation of systematic programs in educational policy that viewed an educational institution as a comprehensive organization. The introduction of the new management method ensured continuous improvement of each member of the organization and the entire organization as a whole.

The implications of total quality management in education consist of two somewhat different, but generally related processes. The first is the adoption of the philosophy of continuous improvement of the educational process that reveals a new vision of managing an organization. The second is the mastery of a set of practical actions that consists of tools and methods aimed at promoting continuous improvement. For example, Edward Sallis in the book "Total Quality Management in Education" revealed the implications of total quality management in organizing the scientific process. E. Sallis showed that the implications primarily affect the management of educational institutions, since it is a new philosophy and methodology of management. Managing requires not only knowledge of the features of total quality management. It should also acquire practical skills that include new approaches to address organizational, leadership, and teamwork issues⁶.

The implication of total quality management in higher education management involves a shift from short-term expediency to long-term quality improvement. In fact, it is a return to the meaning of ancient paideia, when a teacher was regarded not as a bearer of knowledge, but as a mentor and guide to life. The teacher defined the student's way of life, forming his/her involvement not only in current life processes. The teacher ascended with the student to the image of a higher idea or to universal consciousness.

S. Sahney claims that to achieve the competitiveness of educational institutions, as well as to survive and succeed in the long run, the implications of total quality management is a prerequisite. Focusing on engineering and administration institutes, S. Sahney tried to develop an integrated and customer-centered model of quality management in education through the use of several methodologies to evaluate the service quality. S. Sahney placed major emphasis on improving the service and developing educational services by incorporating the voice of the customer⁸.

⁷ V. Bilyk, I. Sheremet, *A New View of the Nature of Reality and the Teaching Higher-Level Cognitive Strategies*, "Philosophy and Cosmology" 2019, no. 22, pp. 92-100.

⁶ E. Sallis, *Total Quality Management in Education*, (3rd ed.), Routledge 2014.

⁸ S. Sahney, *Use of multiple methodologies for developing a customer-oriented model of total quality management in higher education*, "International Journal of Educational Management" 2016, no. 30(3), pp. 326-353.

In general, the implication of total quality management in higher education management involves the following steps:

- 1. The process of managing a higher education institution. It includes strategic planning; recruitment and training of staff; providing resources and agreeing on what they teach, how they teach and how they assess learning outcomes. E. Psomas and J. Antony studied the implications of total quality management in 15 private higher education institutions in Greece. The evidence of the results of these implications proves once again the effectiveness of this method of management in the growing competition in the market of educational services.
- 2. The process of improving the quality of teaching. Students are viewed as buyers of educational services and at the same time as participants in the educational process. Administrators involve students in their own education, teaching them to evaluate the learning process and accept responsibility for their learning. According to the study of L. Hickman and M. Akdere, about a third of US voters believe that colleges and universities have a negative impact on the nation, demonstrating that quality assurance is not pursued in higher education. The authors show how the combination of Stakeholder theory and Total Quality Management change the practices in the context of the US educational policy¹⁰.
- 3. The process of improving the quality of organizing the work of employees. The staff working in higher education are required to change attitudes and methods of work aimed primarily at improving the quality of the educational process. Firstly, this implies the creation of appropriate working conditions. Favorable working conditions have a key impact on the employees' ability to do their jobs properly and effectively. Secondly, encouraging employees and recognizing their successes and achievements are of importance. Ordinary employees should have the opportunity of career advancement. They need to be confident that their efforts will be appreciated and that the goals they have achieved will lead to even greater success in the organization.

The implications of total quality management in higher educational management are usually performed by a series of small complemen-

⁹ E. Psomas, J. Antony, *Total quality management elements and results in higher education institutions: The Greek case*, "Quality Assurance in Education" 2017, no. 25(2), pp. 206-223.

¹⁰ L. Hickman, M. Akdere, *Stakeholder Theory: Implications for Total Quality Management in Higher Education*, [in:] *Fourth International Conference on Lean Six Sigma: Leading the Future of Lean and Six Sigma Research Methodologies*, Purdue University 2017.

tary projects. The philosophy of total quality management is inherently large-scale, inspiring and comprehensive, but its practical implementation is phased, very practical and consistent. The durable and lasting changes are based on a long series of small and achievable projects¹¹.

Globalization of modern science requires from the institutions of higher education to improve the quality of scientific research, to introduce interdisciplinary approaches to the creation and dissemination of intellectual resources for active participation in the world scientific space. Actualization of the problem of knowledge management culture is caused by the need to mobilize scientific activity, to practically implement scientific results, and improve the quality of higher education.

Continuous technological and demographic changes, the policy of 'open borders', as well as some other reasons are forcing the European higher education system to be flexible and constructive at all three organizational levels of knowledge management: cognitive, managerial and technological ones.

The cognitive level of organizing knowledge management culture provides for the study on the nature of knowledge, the features of knowledge development, the ability to manage knowledge, information culture, etc. The research at this level involves a change in the style of thinking, mobilization of individual intellectual potential, creativity, transformational leadership, etc.

The cognitive level provides for the conceptualization and formalization of knowledge management culture. B.-S. Tan offered the research tools to investigate the relationship between organizational culture and the performance of knowledge management. Researchers use different approaches; however, they obtain the same result: more homogeneous cultures, which encourage teamwork and have a clearly articulated mission, improve organizational performance and, accordingly, knowledge management¹².

Knowledge management models are aimed at conceptualizing and promoting information culture. One of such models is presented in the study of M. S. Reinhardt, et al. The model demonstrates possibilities of promoting a specific information culture and energy culture among students of higher education institutions. The authors propose the use of didactic materials and educational strategies that promote learning and development practice in the context of an efficient and transparent

¹¹ O. Horban, L. Babenko, L. Lomachinska, O. Hora, R. Martych, *A kknowledge management culture in the European higher education system*, "Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu" 2021, no. 2, pp. 173-177.

¹² B.-S. Tan, *In search of the link between organizational culture and performance: A review from the conclusion validity perspective*, "Leadership & Organization Development Journal" 2019, vol. 40, no. 3, pp. 356-368.

knowledge transfer process, as well as individual practices in behavior change when using energy¹³.

The study on innovation and knowledge exchange in the academic literature is of great importance in organizing knowledge management culture in the higher education system. Knowledge exchange in the academic environment is considered to be one of the most important research topics in the field of knowledge management. Knowledge sharing is a major driver of innovation. An organization that encourages knowledge sharing fosters innovative opportunities.

Castaneda D. I. and Cuellar S. found 7991 publications between 1973 and 2017 which deal with innovation and knowledge sharing. They used the H-index to find the consolidated topics. The consolidated topics in knowledge exchange turned out to be knowledge transfer, knowledge management, and technology transfer. In the case of innovation, they covered the topics of innovation systems, technological innovation, product development and creativity.

Castaneda D. I. and Cuellar S. found that in 2017, the number of published articles on relationships, knowledge sharing and innovations was higher than over the previous years. They concluded that the study on knowledge exchange and innovation moved from a technological approach to knowledge networks at the stage of primary development to knowledge acquisition at the highest stage of development¹⁴. Castaneda and Cuellar claim that dialogue and collaboration are the main tools for transforming knowledge into innovation. Knowledge is exchanged to foster innovation. This natural focus on dialogue and collaboration explains the collective creation of knowledge and the production of goods and services.

Johanson M., Kao P. T., and Lundberg H. investigated the efficiency of knowledge development and knowledge management as a way of attracting top professionals and internationalizing an organization. The transfer of three types of knowledge was researched: general knowledge of a foreign market, knowledge of social networks, and professional knowledge. The authors considered both the private and professional connections of the visiting researchers. The research shows that characteristics of a localized specialist and organization can influence the type of transferred knowledge and the way it is used. The results of the study reveal the key role of a person as a bearer of knowledge and show an al-

¹³ M.S. Reinhardt, B. Ríos, C.P. Tello, F. González Navarro, H. Campbell Ramírez, *A knowledge management approach to promote an energy culture in higher education*, "Knowledge Management Research & Practice" 2020, no. 18(4), pp. 424-438.

¹⁴ D.I. Castaneda, S. Cuellar, *Knowledge sharing and innovation: A systematic review*, "Knowledge and Process Management" 2020, no. 27, pp. 159-173.

ternative way of acquiring knowledge in the context of organization internationalization¹⁵.

The research of M. Johanson, P. T. Kao, and H. Lundberg proves that the internalization of universities is one of the ways to 'instill' advanced knowledge in the organization, thereby improving its organizational and information culture. Private and professional contacts of visiting researchers increase the intellectual potential of universities and improve the local information and organizational culture.

Another way to 'instill' advanced knowledge in universities was studied by R. N. Pagani, et al. Their research proves that one of the ways to access advanced knowledge can be (1) international movement of scientists from developing countries, as well as (2) international student mobility as a way to increase tacit knowledge in the country. R.N. Pagani et al. studied two groups of students, one from Brazil and the other from France, who had been participating in an international student mobility program for more than six months. The results of the study identified the main obstacles and the most effective mechanisms for this category of knowledge and technology transfer. Based on the results R.N. Pagani, et al. developed a model in which two universities are used as an interface – transmitting and receiving¹⁶.

Cegarra-Navarro J.-G. and Martelo-Landroguez S. Draw attention to the problem of intellectual capital, which is created and developed by the institutions of the higher education system, consists not only of knowledge and practice of its application. The creation of knowledge, its development, and transfer is accompanied by rumors, gossip, inappropriate or false beliefs, delusions, etc., i. e., creating counter-knowledge. The research by J.-G. Cegarra-Navarro and S. Martelo-Landroguez prove that organizational memory not only improves the application of acquired knowledge, but also contributes to the reinforcement of counter-knowledge. Moreover, the research shows that developing organizational memory on the pre-existing link between knowledge and counter-knowledge reduces the flexibility of an organization or "organizational flexibility" 17.

¹⁵ M. Johanson, P.T. Kao, H. Lundberg, *Knowledge grafting during internationalization: utilizing localized professionals in the foreign market*, "Journal of Knowledge Management" 2020, vol. 24, no. 9, pp. 2009-2033.

¹⁶ R.N. Pagani, B. Ramond, V.L. Da Silva, G. Zammar, J.L. Kovaleski, *Key factors in university-to-university knowledge and technology transfer on international student mobility*, "Knowledge Management Research & Practice" 2020, no. 18(4), pp. 405-423. ¹⁷ J.-G. Cegarra-Navarro, S. Martelo-Landroguez, *The effect of organizational memory on organizational agility: Testing the role of counter-knowledge and knowledge application*, "Journal of Intellectual Capital" 2020, vol. 21, no. 3, pp. 459-479.

The more knowledge an organization creates, the more counter-knowledge appears. J.-G. Cegarra-Navarro and S. Martelo-Landroguez emphasize that if the influence of counter-knowledge is not promptly reduced, then its accumulation becomes an obstacle to innovation and creativity. The accumulation and consolidation of counter-knowledge lead to a decrease in the effectiveness of an organization in creating knowledge. Cegarra-Navarro and Martelo-Landroguez point out the need to envisage the ways of counteracting the counter-knowledge in modeling knowledge management.

The managerial level of organizational and information culture in the European higher education system is guided by two megatrends:

- 1. Information and communication technologies which are continuously becoming more complex.
 - 2. Globalization.

The current competitive environment is forcing the European higher education system to continuously improve knowledge management models, organizational and information culture. The main feature of universities is the fact that they must not only correspond to modern trends, but also be ahead of them. The university, as a specific organizational structure, should promote an advanced knowledge management culture. It should become an example of a new organizational culture, which by its viability, proves the effectiveness of implementing the latest scientific developments in everyday practice.

In our opinion, the experience of leading European universities, which have continuously improved their own organizational and information culture in difficult competitive conditions, is of particular interest for Ukrainian universities. Therefore, a retrospective analysis of the transformational path of a British university towards achieving a new radical mission – to become a 'University of Entrepreneurship' – seems to be an opportunity to rethink the experience of the UK higher education system in order to take the best for its own reform.

Purcell W.M. and Chahine T. identified the main idea at the heart of reforming the UK higher education system. Universities are seen as a community of knowledge workers and professionals in providing services in which leadership and management are collegial and consistent. A collegial organization, which is based on conviction and consensus rather than dictate, has the potential for strategic transformation. The collegial organization of universities activates people and unites them around a common goal¹⁸.

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¹⁸ W.M. Purcell, T. Chahine, *Leadership and governance frameworks driving transformational change in an entrepreneurial UK university*, "Leadership & Organization Development Journal", vol. 40, no. 5, pp. 612-623.

Thus, effective reform of the higher education system in the current competitive environment is based on the conscious interaction of leaders with social networks, and is aimed, first of all, at the disclosure and purposeful implementation of the potential of social networks. It is the collegial management model that allows universities to develop and implement advanced organizational and information culture, as well as to carry out global transformations of the organization in an extremely difficult competitive environment.

The research by W.M. Purcell and T. Chahine proves the importance of the connection between the command and control structure of the university and the social networks of the staff and stakeholders. This connection is based on the achievement of a common goal – the prospects for university development. Purcell and Chahine conclude that only the organization based on transformational leadership can thrive in a changeable, complex and ambiguous environment and maintain a competitive advantage in a dynamic global market. Leaders who form the backbone of the university command and control structure should be able to use social forces and inspire people to take actions based on a common vision of the university prospect, including the perspectives of these project participants¹⁹.

The conditions of the pandemic have brought about significant changes in the organization of knowledge management culture in the modern system of higher education. The effectiveness of distance teaching and distance organization of higher education has come to the fore. This raised the need to improve the management models of higher education institutions and to change the functions of the key actors in management models. S. Mysirlaki and F. Paraskeva presented the results of studying the influence of emotional intelligence and transformational leadership on the effectiveness of a virtual team²⁰. S. Mysirlaki and F. Paraskeva focused on three factors: team effectiveness, organizational vitality, and team and organizational satisfaction. The authors found a significant predictive relationship between the perceived emotional intelligence of a leader and the factors of virtual team effectiveness.

The research by S. Mysirlaki and F. Paraskeva justifies the increased dependence of the quality of distance education on transformational leadership. The organization of knowledge management culture in the modern higher education system has come to depend on two key factors: opportunities for higher education managers to motivate the

¹⁹ Ibidem.

²⁰ S. Mysirlaki, F. Paraskeva, *Emotional intelligence and transformational leadership in virtual teams: lessons from MMOGs*, "Leadership & Organization Development Journal" 2020, vol. 41, no. 4, pp. 551-566.

research and teaching staff and opportunities for teachers to motivate students. The research also substantiates a direct relationship between organizational culture and trans- formational leadership.

Communication with production occupies a key place in the organizational culture of modern European education. The main mission of universities is to provide an effective link between knowledge and practice. 'University of entrepreneurship' is a new sense of organizational and information culture on the basis of which the European system of higher education is being reformed.

The relevance and necessity of communication between universities and manufacturing companies is proved by the research of M. van Oostrom, J. A. Pedraza-Rodríguez, and M. Fernández-Esquinas²¹. The authors of the study surveyed 737 companies in the regional innovation system of Andalusia, Spain. The aim of the survey was to prove the importance of the proximity of manufacturing companies to universities and the existence of institutions specializing in the knowledge transfer between universities and companies. The authors concluded that both companies and the engaged institutions located in the Science and Technology Parks are essential in advancing knowledge with local universities. The manufacturing companies, the university and the institutions linking the companies with the university when located in close proximity to each other can ensure the most effective creation of knowledge, its promotion and implementation into production.

An important place in modern studies on the managerial level of organizing knowledge management culture is occupied by the studies on 'knowledge spillovers effects'. G. Barboza and A. Capocchi presented the results of knowledge spillover effects on employment using the database of 245 innovative Italian startups created as a result of adopting the Legislative Decree 179/12 in Italy in 2012²². The empirical results support regional specialization as a major force for knowledge creation and transfer, leading to an increased employment rate. The study by Barboza and Capocchi found that there was a lack of technological convergence between the regions since characteristic regional differences were not overlapped by the knowledge spillover effects.

The study by G. Barboza and A. Capocchi demonstrates that regional differences and limited transfer of knowledge between the regions

²² G. Barboza, A. Capocchi, *Innovative startups in Italy. Managerial challenges of knowledge spillovers effects on employment generation*, "Journal of Knowledge Management" 2020, vol. 24, no. 10, pp. 2573-2596.

²¹ M. van Oostrom, J.A. Pedraza-Rodríguez, M. Fernández-Esquinas, *Does the Location in a Science and Technology Park Influence University – Industry Relationships?: Evidence From a Peripheral Region*, "International Journal of Knowledge Management (IJKM)" 2019, vol. 15(3), pp. 66-82.

remain the main obstacles to the flow of knowledge. The study suggests that regional universities face the challenge of developing, transferring and acquiring knowledge. The data support the existing regional heterogeneity in terms of economic and technological specialization as sources of employment.

One way to overcome the knowledge spillover effects faced by regional universities was suggested by M. E. Brown, T. Rizzuto and P. Singh. Their research reveals the peculiarities of strategic compatibility, cooperation and collective influence of the European higher education system on societal changes²³. The authors highlight the concept of 'strategic compatibility assessment'. They suggest using the strategic compatibility assessment (SCA) to identify the inter-organizational potential for collaboration within and between universities as a means of motivating the synergies that are required for societal change initiatives.

Brown M. E., Rizzuto T., and Singh P. argue that the higher education system best solves complex social problems only when solutions are achieved by the joint efforts of higher education institutions. An interuniversity partnership is sustainable and efficient when relations between universities are governed by the command and control structure of the Ministry of Education.

Brown M.E., Rizzuto T., and Singh P. developed an approach to identifying and forming mutually compatible cooperation between the organizations responsible for sustainable development and prosperity of society. The proposed approach allows improving the higher education governance model based on feedback from the changing European society.

The technological level of organization and information culture in the European system of higher education provides for the study on the possibilities of modern information and communication technology in the accumulation, transfer and management of knowledge. Information and communication technologies are seen as a vital part of knowledge management, providing means for creating, sharing and collecting knowledge.

The research on the relationship between knowledge management and information technology has identified four main directions for the near future. These are social software, consumerization (of knowledge), human factors, and organization of work, systems and practices²⁴.

²³ M.E. Brown, T. Rizzuto, P. Singh, Strategic compatibility, collaboration and collective impact for community change, "Leadership & Organization Development Journal" 2019, vol. 40, no. 4, pp. 421-434.

²⁴ P. Sarka, P. Heisig, N.H.M. Caldwell, A.M. Maier, C. Ipsen, Future research on information technology in knowledge management, "Knowledge and Process Management" 2019, no. 26, pp. 277-296.

Modern realities demonstrate that the efficiency and competitiveness of science and education are ensured not only by human capital, but also by the role of artificial intelligence in the development of human capital.

Vodenko K.V. and Lyausheva S.A. developed the concept of organizing science and education in the form of 4.0. The proposed concept attracts attention by the fact that, on the one hand, in science and education, the intellectual capital is determined by the decisive factor of production. However, on the other hand, human intelligence does not have to dominate the structure of intellectual capital. The concept claims that artificial intelligence is one of the most popular technologies of the 4.0 Industry in the system of science and education and has broad prospects for practical implementation²⁵.

The research by D. Alassaf, M. Dabić, D. Shifrer and T. Daim draws attention to the fact that an important place in the organization of knowledge management culture in the modern system of higher education is occupied by open innovations and technologies for their transfer²⁶. D. Alassaf, et al. conducted a study "Determination of industrial educational needs in the field of open innovation in Europe" through quantitative analysis using a logistic regression model. The authors surveyed 528 employees across 28 different industries in 37 countries mostly in Europe. The obtained results show that the openness of the organizational and information culture increases the feasibility of adopting the 'open innovation' paradigm. It is even of greater importance that the results of the study by D. Alassaf, et al. highlight the positive mediating effects of knowledge and employee rewards on the relationship between open organizations and open innovation.

The study by D. Alassaf, et al. explains the reason why cultures of open borders are more likely to have a successful implementation of open innovations and, accordingly, to be more successful in a competitive space²⁷.

Noteworthy is the study on a new, intensively developing information space, coworking space (CWS). Coworking space (CWS) is a globally growing phenomenon of a new collaborative work environment

²⁵ K.V. Vodenko, S.A. Lyausheva, *Science and education in the form 4.0: public policy and organization based on human and artificial intellectual capital*, "Journal of Intellectual Capital" 2020, vol. 21, no. 4, pp. 549-564.

²⁶ D. Alassaf, M. Dabić, D. Shifrer, T. Daim, *The impact of open-border organization culture and employees' knowledge, attitudes, and rewards with regards to open innovation: an empirical study,* "Journal of Knowledge Management" 2020, vol. 24, no. 9, pp. 2273-2297.

²⁷ Ibidem.

used by freelancers, entrepreneurs and small businesses that often work in the information technology and creative industries.

The research by A. Rese, C.S. Kopplin and C. Nielebock discovers the meanings of coworking space (CWS). A. Rese, et al. studied the exchange of knowledge among colleagues with a special focus on attitudes, behavior and individual creativity. The research shows that the attitude towards knowledge sharing and the actual sharing behavior in coworking spaces (CWS) improve the creativity of colleagues and the organization as a whole²⁸.

Thus, the conducted analysis allowed us to conclude the following:

- 1. In modern research, education is regarded as a behavioral model in which management models play an important role. Taking into account the international experience, it was proved that the implications of total quality management in educational policy would significantly increase the effectiveness of reforming the quality of education.
- 2. Knowledge management culture in the European higher education system is not limited to the process of knowledge creation, knowledge exchange and knowledge implementation. The European higher education system is faced with the need to solve the problem of the impact of knowledge management culture in individual, group and organization performance.
- 3. Knowledge management culture is closely related to the organizational culture of the European higher education institutions. The integration processes taking place in the European Union are not likely to overcome regional characteristics. Within the boundaries of the European higher education system, one can observe different dynamics of development and the relationship between organizational and information culture.

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²⁸ A. Rese, C.S. Kopplin, C. Nielebock, *Factors influencing members' knowledge sharing and creative performance in coworking spaces*, "Journal of Knowledge Management" 2020, vol. 24, no. 9, pp. 2327-2354.

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