# Some Aspects of the Implementation of the Concept of Sustainable Work for Older Workers in the Conditions of Digitalization

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Abstract—This article discusses some aspects of preserving the potential of older workers in the development of digitalization. Employers are concerned about the decline in the labor potential of older workers, and to solve this problem, we can use the approach of preserving the ability to work, which is part of the broader concept of successful work of older people.

Keywords—Preserving the potential of employees, the concept of sustainable work, older employees, older workers.

### I. INTRODUCTION

Demographic changes lead to a change in the age structure in the world. The working-age population is decreasing. At the same time, the labor force is not only shrinking, but also increasingly aging and becoming more heterogeneous in terms of its qualification background, competencies and demographic characteristics. Continuous development of competencies and qualifications of employees that go beyond professional training becomes the main task of the enterprises to maintain their competitiveness, especially with the accelerated development of IT technologies.

Technological changes, growing digitalization, as well as changes in the organization of work lead to a change in the structure of tasks necessary for effective personnel management. Maintaining capacity and improving efficiency is becoming more important than ever. The development of competencies and the promotion of readiness for lifelong learning becomes the task of developing the staff, the manager and each individual employee. Both guarantee that employees will also meet the requirements of tomorrow, which have increased significantly against the background of technological, digital and social changes in recent years.

# II. AGE-RELATED DESIGN OF THE WORK OF OLDER PEOPLE TO PROLONG SUCCESSFUL WORK ACTIVITY

The effects of demographic changes are noticeable in various industries, services and IT [8]. In many areas, it is necessary to ensure high mental and / or physical preservation and development of the potential of employees. But with age, many workers have a desire for physical and psychological relaxation of the production load.

The physical demands of work and everyday stressful situations may no longer meet the capabilities of an aged employee and the existing performance requirements. The main task is to preserve the competencies of senior employees of the company, and even, if possible, to develop potential. In order to avoid leaving the company or early retirement of older employees, there is a need to change the forms of professional activity of older employees.

When the professional competencies of older employees are preserved in the work, younger employees benefit from the experience of older employees. The trends are such that the staff at enterprises is getting older and now includes three or four generations at the same time with very different requirements for personnel management and workplace ergonomics.

In addition, companies with their demographically heterogeneous workforce must respond to rapidly changing technologies and markets. This can be done only if knowledge and values are transferred to all employees through age, professional and hierarchical boundaries and acquired experience.

The management of employees 'operational competencies has a key function: only with the development of employees' competencies integrated into the work process and professionally supported, it is possible to ensure the productivity, employment and capacity of employees throughout their working life. Innovative concepts of training and interaction between experienced in professional practice (mainly older employees) and less experienced in professional practice (younger specialists) are becoming increasingly important in order to intelligently accompany the optimization of knowledge transfer at enterprises and, thus, improve labor productivity and contribute both to the development of the company's innovation in general and the innovative abilities of employees in particular.

According to the German researcher Dirk Backer, societies are constructions in constant change. "The next society differs from the modern society, like electricity from mechanics. The schemes are superimposed on the levers. The dynamics of modernity, which was read only as history, progress and decadence, is dissolved in turbulence, which only singularities know." We experience this "next society" as a profound change at all levels of social reality. The increasing complexity and globalization, digitalization and increasing

dynamics of our life, the increasingly high speed of process changes, have radically changed the requirements for individual employees and organizations [3].

For the development of innovative ability, especially for older workers, it is necessary to take breaks in their main professional activities. It is considered necessary that older employees leave their work processes more often, whether it is changing the projects in which they work or improving their skills. Thus, there is a launch of innovative processes or, in other words, the development of the potential of older workers. Participation in horizontal professional activity at the enterprise is also considered a variant of conscious search and development of innovative abilities. And here, creative areas are often opened up for employees, in which they can acquire and test new skills, for which the space for maneuver in their main professional activity seems too narrow to them [9].

German researchers have an assumption that age should not be considered as a relevant factor of innovation ability, including in the development of IT technologies. Both older and younger employees imagine that age has a neutral or even positive impact on a person's creativity and innovation ability. Both younger and older employees have a very differentiated view of the relationship between age and innovation ability, which is closely related to a positive assessment of the experience of changing activities. It is indicated that if one employee develops as a specialist, that is, has a long, deep experience in a certain field, and the other has become a generalist with a wide experience, then both can simultaneously be very innovatively capable. In scientific papers on aging and employment, the European Commission identifies as the main weakness of older workers the difficulty in adapting to new technologies and, in some cases, to the requirements of mobility and flexibility. In addition, some survey respondents believe in the" digital division " of generations or see the danger that older employees do not always notice technological changes at an early stage. Despite this fact, such blindness is not critical. This shows the researchers ' belief that technologies are just tools, and innovations should be connected with the social connection between employees [6].

In 2011, the Institute of Labor Science and Technology Management at the University of Stuttgart in Germany conducted a study on the relationship between age and innovation ability. Surprisingly, according to the results of the survey, the innovation ability of older employees was estimated higher than that of young ones, both from the point of view of the oldest employees (51-65 years old) and their young colleagues (18-31 years old). Young employees from all respondents received high indicators for their ability to communicate, team and readiness to learn. The weaknesses of the younger ones, according to the entire sample, lie in the areas of experience and professional knowledge. The selfassessment of junior employees coincides with the results of the entire sample. Older employees in the average assessment of innovation-related properties evaluated among all respondents are distinguished by special strengths in the field of experience and professional knowledge. In addition, all respondents attribute team and communication skills to their strengths. The weaknesses of senior employees, according to the general sample, lie in the area of readiness for learning and for the expression of creativity. However, the older ones rated themselves higher in terms of communication qualities and

teamwork than their younger employees. Further surveys of HR managers revealed that they attribute higher innovation abilities to young employees than they do to themselves. Also, the stereotype of a reduced ability to develop older workers may be related to the fact that in some cases the innovative abilities of older people are leveled by their other qualities.

The focus is primarily on the loss of functions and performance associated with age. Performance limitations apply, in particular, to physical skills, such as:

- The ability to perceive,
- Fine motor skills,
- Dexterity,
- Muscle strength,
- Speed.

Also, cognitive achievements can show negative dynamics, such as:

- Responsiveness in solving complex tasks,
- Low stress tolerance under emotional stress,
- Interest in professional development,
- Openness to change,
- Ability to concentrate attention,
- Short-term memory,
- The learning rate for older employees is usually lower.

But the company may well compensate for some of the shortage of the above-mentioned skills due to improved working conditions and means, and the employees themselves can use the accumulated experience and professional skills. Moreover, depending on the nature and duration of the activity, certain areas of competence may even "mature". They include, for example:

- A sense of responsibility,
- Independence,
- Timeliness and reliability,
- Ability to make decisions and judgments,
- Holistic thinking,
- Accuracy in performing tasks,
- Self-esteem and reflectivity,
- Security awareness,
- A sense being feasible and essential,
- Expressiveness and language dexterity.

While the increase in age previously equated to a lack of physical performance, today the process of growing up is differentiated in terms of personal strengths and weaknesses [7].

Thus, in order to preserve the innovative ability of companies as a whole in demographic changes, it seems inevitable to promote and improve the cooperation of older and younger generations, since both generations can complement each other in their strengths and weaknesses and benefit each other. In addition, working with mixed groups allows you to maintain the productivity of older employees. At the individual level, there is a high need for support in active, innovation-oriented planning of further employment of older workers. And socially-oriented employers are actively engaged in age-related job design for older age groups. This is done in order to strengthen and maintain the working abilities of all employees – and, in particular, older employees who find it especially difficult to adapt to the digital world throughout their working life. For successful personnel management, there is already an internationally proven

concept of "preserving the ability to work" - the presence of a labor skill [4].

The ability to work means "the sum of factors that allow a woman or a man to successfully cope with the task in a given situation" [10]. This definition is quite contradictory. On the one hand, we are talking about factors that affect a person's performance, in particular, his so - called human "functional ability" - health, physical, mental and social efficiency, as well as professional competence and qualifications. On the other hand, it is about the factors of a specific working situation, that is, in the organization of the company's work, in particular, about the content and environment of work, as well as the management style and working climate. Thus, the strengthening of labor skills within the framework of human resource management is both the development of the employee and the development of the organization itself.

The concept of labor skill is based on the assumption that the sustainable strengthening of work skills can be successful only if the company implements the concept of measures that simultaneously combines all of the above factors. The threat of a decrease in labor skill is expected with increasing age, but is not inevitable. Companies can act against the "wear and tear" of work skills if they actively adhere to the concept of "preserving the work skill".

All companies can be divided into 2 groups:

- 1. Employers who support the working abilities of employees, regardless of the length of service and age of employees.
- 2. Employers who do not adhere to the concept of "preserving the ability to work". Not only age-related employees fall into the risk zone, but also those with more than 7 years of work experience in this organization. It is believed that after this period, the employee is subject to emotional burnout through "internal dismissal". Here, rather, there is a choice that the employee can quit not only from this particular company, but also change his profession, or restore his labor skills and continue working. If employers have not made any attempts to develop an employee's potential for 7 years due to violations of discipline, difficulties in the team climate, then the risk of employees leaving increases.

The training of older employees involves either special training of older employees, or the integration of age-related employees into existing activities. Training can provide an increase in the general and specific human capital of the company and can include a wide range of different types of activities – classroom training, practical classes, acquaintance with new technologies, and so on. In practice, participation in training decreases with age [13].

Fair enough: those who want to acquire new knowledge or acquire existing skills in old age make different requirements for the goals and content of training, as well as for the necessary learning environment, than at a younger age. This is due, on the one hand, to the professional and life experience gained and to age-related changes in the physical constitution (for example, a decrease in the ability to concentrate). On the other hand, the duration of the termination of training also plays a role. The longer a person refuses compulsory education, the more difficult it will be for him to start it again, and then continue it continuously. In particular, it should be taken into account that older employees already have an educational biography during their professional life, for example, based on foreign, managerial and / or project

experience in various professional fields, fields of activity and companies. This should be taken into account when developing training proposals, as well as the personality of each participant. Older employees are motivated, especially if the relevant training tasks are focused on personal every day and work experience, that is, they are performed with a high proximity to reality. They should be different in level of complexity and relate to the specific needs of each participant. The benefits of a possible learning experience should not only be given formally, but also be suitable for everyday work. If a certain connection with the current professional activity is not established, the efforts and significance of training are quickly and critically questioned.

Learning is tedious. Therefore, older employees need a high level of motivation and social support when acquiring new competencies and qualifications. Activating methods of teaching and learning (for example, discussions, case studies, group and project work) just as important for this as noticeable success and success in training. Older employees study well in small teams, together with colleagues, friends or partners. Their inclusion promotes a lively exchange of experience and information about the relevant content of training and its practical implementation. In addition, it is important to use the knowledge gained in the training process to transfer agerelated employees to other activities. Older workers often undergo training, but continue to work in their traditional jobs, which tend to decrease in labor productivity [11].

While interns and young employees, as a matter of course, use the iPod and Zoom, older employees often find it difficult to cope with modern information technologies. And this needs to be overcome: the confident use of modern means of communication and the use of "social networks" (for example, Facebook) can open the horizon for older employees for new information and contacts.

The perception and performance of daily work is largely determined by social competencies. Successful social behavior, as described, for example, by the concept of emotional intelligence, is based on a realistic self-perception, as well as the ability to self-regulate and adequately handle people and situations. For this purpose, numerous areas of training and competencies are used, especially for older employees, such as communication, conflict, stress and time management, as well as competent handling of modern information technologies.

Special training for older employees can be very effective in increasing the relative productivity of older employees, since an increase in the intensity of training increases the productivity of the enterprise on average [14], and previous training seems to be a good predictor of differences in productivity between older employees [1]. Some studies have determined that training can have positive side effects between employees [5]. For example, trained age-related employees can transfer some of their knowledge, and this increases the productivity of their young colleagues. In addition to side effects, the lack of professional retraining for older employees can lead to the formation of expectations among young employees that at some point in their career, investments in professional development will no longer be beneficial [2]. Therefore, training with older employees can also increase the productivity of young employees. If we assume that the indirect effect for young workers is weaker than the direct effect from the training of older workers, then we expect an increase in relative labor productivity for older workers.

Realizing the importance of training older workers, business managers need to pay more attention to the quality of training. British Employee Survey data shows that older workers are more likely to receive cheaper on-the-job training and shorter training periods than younger workers. In addition, older workers are more likely to refuse to participate in training when their employers offer it [12].

The concept of preserving the ability to work plays an important role in long-term professional practice and, consequently, indirectly, increasing the functional age of employees. The concept of preserving the labor skill provides a preventive impact and improves the economic success of the company. In addition to the function of early warning of turnover, this approach allows you to achieve the company's goals in the field of personnel management:

- Attract new employees. A healthy team contributes to the growth of the company's attractiveness as an employer.
- Limit the fluidity. The company will be able to use the skills of valuable employees for longer.
- Reduce personnel costs.
- It is better to use the competencies of older employees.

Expensive, but often not taken by employees, one-time measures of motivation programs (back training, stress management, etc.) can be replaced with more effective individual programs.

The described approach is part of a broader "concept of sustainable work", which focuses on the empowerment of older workers.

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# REFERENCES

- [1] P. Andrisani and T. Daymont. Age changes in Productivity and Earnings, in S. Sandell (ed.). The problem isn't age: Work and Older Americans. New York, Praeger, 1987.
- [2] B.Avolio, D. Waldman and M. McDaniel, "Age and work performance in nonmanagerial jobs: The effects of experience and occupational type", Academy of Management Journal, vol. 33, no. 2, pp. 407-422, 1990
- [3] Baecker Dirk, "Zukunftsfähigkeit: 16 Thesen zur nächsten Gesellschaft" Revue für postheroisches Management, vol. 9, pp. 9–11, 2011
- [4] Berger Gerhard; Zimber Andreas, (2014) Alter(n)sgerechte Arbeitsplätze in der Altenpflege. Wege zur Stärkung der Arbeits(bewältigungs)fähigkeit (nicht nur) der älteren Mitarbeiter/innen/ Bericht im Rahmen des EQUAL Modellprojekts Altersgerechte Arbeitsplätze. [Online]. Available:http://www.equal-altenhilfe.de/).
- [5] L. Dearden, H. Reed and J. Van Reenen, "The Impact of Training on Productivity and Wages", Evidence from British Panel Data, Oxford Bulletin of Economics and Statistics vol. 68, no. 4, pp. 397-421, 2006.
- [6] European Commission, (2016) Ageing and Employment. [Online]. Available:(https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0571:FIN: FN:PDF)
- [7] Fehlau Éberhard G. 30 Minuten Erfolgsfaktor 50+. GABAL Verlag GmbH, Offenbach, 2011.

- [8] Joachim Hasebrook, Bernd Zinn, Alexander Schletz Hrsg. Lebensphasen und Kompetenzmanagement. Springer-Verlag GmbH, Deutschland. 2018.
- [9] Helga Dill, Heiner Keupp (Hg.). Der Alterskraftunternehmer Ambivalenzen und Potenziale eines neuen Altersbildes in der flexiblen Arbeitswelt. Majuskel Medienproduktion GmbH, Wetzlar, 2015
- [10] Ilmarinen Juhani, Tempel, Jurgen. Arbeitsfahigkeit. Was kunnen wir tun, damit Sie gesund bleiben? Hamburg, Hamburg VSA-Verl, 2002.
- [11] B. Koller and H. Gruber. Ältere Arbeitnehmer im Betrieb und als Stellenbewerber aus der Sicht der Personalverantwortlichen. Mitteilungen aus der Arbeitsmarkt- und Berufsforschung vol. 34, 2001
- [12] Mahony Mary O' and Fei Peng. Skill Bias, Age and Organisational Change/ EU KLEMS Working Paper 36, Birmingham, 2008.
- [13] P. Warr and D. Fay, "Short report: age and personal initiative at work", European Journal of Work and Organizational Psychology, vol. 10, no. 3, pp. 343-353, 2001.
- [14] T. Zwick, "The Impact of Training Intensity on Establishment Productivity", *Industrial Relations. A Journal of Economy and Society*, vol. 45, no. 1, pp. 26-46, 2006.