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2.1. E-LEARNING AS A METHOD OF EMPLOYEES' DEVELOPMENT AND TRAINING

Summary: Nowadays, all organizations leading their business are forced to compete with other entities. Significant for the enterprise is to achieve an advantage over other companies. To a large extent this is dependent on workers currently employed by the company. Therefore, concerns are devoting more and more attention to their employees. This is reflected not only in ensuring good atmosphere at work and fair wages. Moreover it is also creating opportunities for self-realization and self-development. Employees who have the opportunity to improve their qualifications and skills are more productive and loyal. Furthermore, they do not think about changing job because their company cares about the appropriate development. Each employee is solely responsible for his professional development. The organization is not obligated to develop the staff competence. However, it shall give them the right tools and support at work, so that they can pursue to improve their competence. The authors in the article want to introduce e-learning, as a modern method of improving the profession. It is a method which offers many advantages and facilities that can be used in individual improvement and training of large groups of employees. E-learning helps in the process of teaching through computers and the Internet. It is the perfect complement to the traditional teaching process. Technological changes and growing availability of the Internet Services bring new possibilities. The combination of a text, an audio, a static image and a video makes possible sharing of all kinds of information and knowledge in an interesting and effective way. The authors emphasize how important it is for business people the freedom of choice and flexibility, so that everyone can learn at their own pace, in the selected location and time.

Keywords: e-learning, advantages and disadvantages of e-learning, employee's development, professional improvement

Introduction

Unstable economic situation in Poland as well as in the world, causes that managerial staff of modern enterprises searches for the sources of savings, also in the area of HR management. Such activities should not be based on reduction of labour costs, rather on maximization of efficiency and quality of human resources. Rational investments in employees and their development is an action helping the organization to maintain its competitive advantage.

In order to define any rational way of investing in personnel these days, an organization needs to apply necessary HR policy, which will systematically regulate the human potential factor.

Employee skills and innovative operations are some possible areas where human resources can become part of core competencies. These core competencies are special capabilities that create high value and differentiates the certain organization from its competitors. The aims of our article are as follows:
- to give a short overview about the growing importance of education and training;
- to describe the essence and meaning of the employees' development;
- to evaluate the different types of e-learning and distance learning as part of the talent management and development.

The growing importance of education and training

The possibilities of billions of students and employees connected by mobile devices will be multiplied in the near future by the help of up-to-date investigations in the fields of artificial intelligence, robotics, autonomous vehicles, nanotechnology, biotechnology and 3-D printing. According to Klaus Martin Schwab *(founder and executive chair of the World Economic Forum)* the fourth industrial revolution will arrive in the near future (Table 1).

Table 1: Navigating the next industrial revolution (http 1)

Revolution	Year	Characteristics of industrial revolutions
1.	1784	The first revolution - used water and steam power to mechanize production.
2.	1870	The second revolution - used electric power to create mass production.
3.	1969	The third revolution - used electronics and information technology to automate production.
4.	????	The fourth revolution - is characterised by a fusion of technologies that is blurring the lines between the physical, digital and biological spheres.

We do not yet know too much about the fourth industrial revolution, but one thing seems to be clear: the response to it must be integrated and comprehensive, involving all stakeholders of the global polity, from the public and private sectors to academia and civil society. Schwab (2016, http1) is convinced of one thing, that in the future, talent, more than capital will represent the critical factor of production. This will give rise to a job market increasingly segregated into "low-skill/low-pay" and "high-skill/high-pay" segments, which in turn will lead to an increase in social tensions.

All these changes and challenges are forcing companies to re-examine the way they do business. Business leaders and senior executives need to understand their changing environment, challenge the assumptions of their operating teams, and relentlessly and continuously innovate (http 1; Turek and Dunay, 2014; Ptak and Daróczi, 2014).

According to the American Bill Gates (MS) by 2025, two-thirds of all jobs in the US will require education beyond high school. At the current rate the US is producing college graduates, however, USA is expected to face a shortfall of 11 million skilled workers to fill those roles over the next ten years. The problem is not that not enough students want to go to college. More students are enrolling in higher education programs than ever before. The problem is that too many drop out before completing their degrees, especially students from low-income families. A student from a wealthy

family in the US is eight times more likely to earn a bachelor's degree by age 24 than a student from a low-income family. Encouraging more low-income and first-generation college students to get college degree is critical – not just for the students themselves, but also for the health of America's economy (http 2).

The tendencies are very similar, there is also a shortfall of skilled workers in Hungary and many students drop out before completing their studies especially in the engineering study programs. E-learning and distance education can help the students of the low-income families. Bernard Marr (best-selling author, key-note speaker and leading business and data expert) concluded that the roll of boss as mentor seems to have fallen by the wayside somewhat in recent years, but people are still craving that kind of development role from their managers. Studies show that employees feel prouder of accomplishing harder work. but they need the right support to get there.

Leaders have to watch for opportunities to teach, to provide additional support, or to invite the right training for the employees. Individual development needs to be a part of every job description (http 3).

The essence and meaning of the employees' development

The organizations aimed at activity and development, need to strongly focus on conscious and planned creation of their brands. The tool useful in such process may be HR policy understood as „a systemized group of assumptions and instructions, which are aimed at optimal shaping personal and interpersonal relationships in organizational units in order to assure these units' efficiency, without compromising personal development of their members. The scientific aim of HR policy is then stimulation of employees, staff behaviours helpful in the organization's objectives achievement" (Wajda, 2003, pp.138-139). The employees' behaviours shaping, requires careful consideration of aspects and areas responsible for development oriented staff attitudes. Such attitude enables the efficient functioning of any modern enterprise in the environment that evolves dynamically, because of the rapid technical and technological progress, or increasing demands of consumers. Therefore, they have to constantly care of the development of their employees. With their knowledge and new competence, they would be sources of innovations, innovative ideas or solutions that further could result in a form of competitive advantage. Such approach becomes very significant in the services sector (Łazorko, 2011). Development is also a chance to the employees themselves, who achieving new skills, increase their worth and strength on the labour market (Gadomska-Lila, Rudawska, Platonoff, 2009).

The development of human resources is based on enabling employees' learning and qualification increase, which eventually leads to the growth of their competence. The general aim of these assets development is assuring the personnel organization stimulating the employees' features, which are the most demanded in terms of the enterprise's objectives. These objectives are achieved, when the organization cares for every employee to obtain knowledge and skills necessary to perform their duties, and whenever these skills are constantly developed in manner enabling the maximization of personnel potential (Armstrong, 2004, p.425).

Development of the employee competence basically may be divided into two stages including:
- education before starting professional work (schools, universities, practice, trainings, probations);
- education simultaneous with professional work (trainings and improving of qualifications, as well as professional career (Szałkowski, 2002; Illés et al., 2015).

Higher educational institutions shall provide a framework which combines theoretical and practical approach (Dunay et al., 2015), which will enable the graduates to use their knowledge at their future workplaces.

Because of the special care, that in a recruitment process there are accepted only the highly skilled, qualified and well educated candidates, it should be considered that their professional potential should be constantly developed. At the same time, the key aspect of this type of development has to be highlighted. Managerial staff should focus on taking care of the possibilities of updating and developing the employees' competence. Creating the proper conditions for development with a passive dimension, should be connected with active operations based on initiating and orientation in a way that it corresponds to the present and future needs of an enterprise.

In its broad understanding, development of human resources may be understood as „purposeful configurations of the action of enriching knowledge, development of skills, shaping the values, attitudes, motivations and skills, as well as taking care of physical and mental condition of the employees, or the actions causing an increase in work efficiency and increase in the market value of human resources" (Pocztowski, 2007, p.274).

On the basis of the above mentioned definition it may be clearly stated that development of an employee is a process, both completing knowledge, as well as learning new skills and competence, necessary for having the tasks effectively performed on the presently occupied position, or the future one.

It may be clearly concluded that the aim of the development of the personnel is to create such a situation, in which knowledge, skills and qualifications of the employees, would enable the organization achieving its goals:
- firstly, increasing efficiency of the organization functioning;
- secondly, meeting the needs of employees in the aspect of creating his professional career taking into account individual aspirations and aims (Gadomska-Lila, Rudawska, Platonoff, 2009, p.211).

Process of development of human resources should be encouraged by proper conditions within organizations, such as: HR strategy correlated with general organizational strategy, organizational culture, system of remuneration, or motivations. Such philosophy normally includes strategic management of human resources, described in the Schuler's model. In this model, the original role is played by the organization strategy, identifying the enterprise's needs, which are associated with specific qualities. Defining needs and forming a strategy, vision and specific strategic aims related both, to external and internal conditions. This creates a basis for stages of strategic staff management, from HR philosophy, through personnel strategy, to the final personnel processes and practices (Listwan, 2004, p.49-50).

E-learning – distance learning

The pace of technological changes occurring nowadays is incredible. Internet became the most popular source of information and the channel of communication. These changes caused that the new possibilities opens while sharing information and knowledge.

Distance learning, is a form of didactic information transferring to dispersed listeners, using various media forms. This form does not require direct, personal contact between teacher and students. English language contains many terms describing remote forms of education, such as: distance learning, distance teaching, distance education, teleteaching, teaching by network, telematic education. Some of these terms, like: distance learning and distance teaching, which define remote forms of learning and teaching, are not treated equally in Polish literature, even though they are used as synonyms in English papers (Clarke, 2007). Both of these terms are complementary, and as such, they describe the process of learning – teaching, which altogether is named as distance education. The literature contains such terms describing remote education as teleteaching, which means remote education with use of telecommunication devices, teaching by network, which is education provided through the computer networks, and telematic education, which signifies didactic process made with modern telecommunication devices in large distances between teachers and students.

The remote education enables didactic process to appear, where its participants remain far from each other, and developed computer and telecommunication technologies, including Internet, make the whole process possible (Janczyk, Sznirch, Wójtowicz, 2010, p.195).

Although the process of implementing e-learning in Poland has been lasting for over several years, it is still a marginal element of the system of education. Regardless the fact that this form of education is being more often used, it is still something new and little known, causing mistrust and suspicion, as unpopular and unavailable (Wilkin, 2009, p.25).

As the specialists in this subject claim, this form of education could be a significant tool, accelerating the process of implementing the necessary changes in the Polish system of education (Mischke, 2008).

E-learning is a distance-learning using modern devices and information technologies, special software and specially prepared teaching material. E-learning may be an individual teaching form, or function as a complementation for the traditional forms of learning (http 4).

In order to understand the possibilities given by e-learning as an educational method, there should be discussed a definition formulated by M. Kubiak who claims that „distance learning is a method of conducting educational process in the conditions that teachers and students are away from each other (sometimes it is a significant distance) and do not meet in the same place, using for sharing information – apart from the traditional means of communication- also modern tele-communicational technologies, transferring voice, video, computer data, and printed materials. Modern technologies also enables direct contact in the real time, between the teacher and student, by means

of audio- or video- conference, dependent on the distance between them" (Kubiak, 2000, p.12). D. Keeng created his definition of distance learning by specification conditions necessary for its appearance. This brings us to the following e-education factors list (Koczy, 2007, p.35-42):
-   teacher and students separated from each other;
-   media used in didactic process;
-   mutual communication (indirect);
-   education system (platform) supervision;
-   necessary technical and technological backgrounds and necessary teams.

It is possible to define e-learning after considering four ways of education, such as: formal, informal, unofficial and accidental. The general idea of education information is always on a first place, and the information society we build today works mainly in digital forms, having Internet as its main source. This medium has many receivers and transfers a lot of information in various forms (in time and space) which constitutes technical means of communication. Despite its huge opportunities, using Internet required breaking barriers of traditional education and modification of teacher's role. As a consequence, the learning processes assumingly based on the personal activity are no more so strictly connected to formal education, despite its organizational and directional role. Electronic (digital) form of information becomes a symbol of e-learning processes. One should stress direct relation between this form of education and IT skills, becoming equally important to reading and writing, which is an indispensable skill in information society (Janczyk, 2008).

Particularly in higher education there is an increasing tendency to create virtual learning environment (VLE), which is in connection with the managed information system (MIS), create a managed learning environment (MLE). On the international service market we can observe a development of MOOC - massive open online courses, that allow us to attend remotely and for free the academic course selected by us. These courses can be ended by final exam. University student status is not required. Catalog of English-language courses can be found e.g. on the website MOOC List. There are MOOCs universities in 98 countries all over the world their share is shown in Figure 1.

Figure 1: Top three of 98 countries USA, India, China – MOOCs University (http 5)
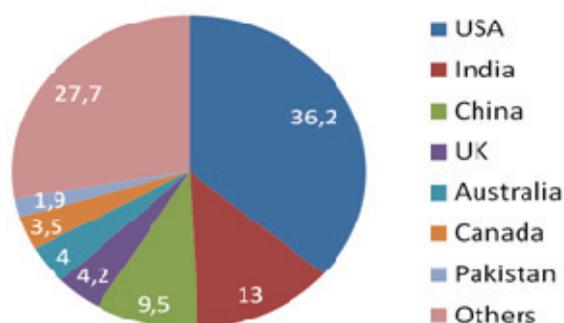
Open Educational Resources (OER) in higher education have the potential to triple in use as primary courseware over the next five years, from 4 percent to 12 percent, according to a survey of more than 500 faculty by Cengage Learning Inc (which is an educational content, technology and services company for the higher education). The use of OER for supplemental learning materials may nearly quadruple in size, from 5 percent to 19 percent (http 6).

Cengage interviewed industry experts and surveyed OER primary adopters, supplemental adopters and non-adopters. Overall, just 4% of the higher education respondents use OER as primary materials. The subject of mathematics (13%) and computing (11%) had the highest usage, while English (2%) and psychology (1%) had the lowest according to the survey (http 6).

As every learning method, e-learning has its advantages and disadvantages of being used in practice. Firstly, the advantages would be discussed, they mainly include:
- reduction of the costs of learning;
- great flexibility of the educational forms and lack of territorial limitations;
- centralization of the learning process;
- standardization of knowledge, and repetitive quality of education;
- contrary to appearances, facilitated contact with the lecturer;
- comfort of a training organization, as well as its contextuality, multithreading and individualization;
- interactivity and engaging form of teaching;
- possibility of better use of organization knowledge and better recognition and understanding of its human capital;
- possibility of being a complementary teaching method for the main one;
- possibility of a dialogue among the participants of the training in order to exchange information, views and knowledge;
- possibility of education for disabled people, who can learn, or study in the places of their accommodation, not looping the availability of the same sources of knowledge, as their healthy colleagues (Hyla, 2009, p.27; Stecyk, 2008).

Apart from the above mentioned advantages, unfortunately e-learning also has numerous limitations and disadvantages that do not occur in case of traditional education.

According to the researchers of the subject (Siemieniecki 2007, Hyla, 2009), the most significant minuses of e-learning are:
- limitations of the groups of interpersonal communication;
- being dependent on technology (equipment and connection quality, quality and type of software) and knowledge (both on the side of the teacher and learner);
- time consuming and expensive analyses, preparing of multimedia teaching materials, as well as their conservation;
- complexity of the organization of a learning process;
- limitations of social networks by being isolated from the teacher and the group;
- limitations concerning the data shared and participation in the functional classes, e.g. laboratories, experiments, etc.;
- features of the Internet, destructive for the user (a lot of interesting information, not only connected with education);

- lack of the motivating atmosphere characteristic for traditional school, or group;
- the necessity to have the predispositions for self-education, training, and self-control.

The above presented statement including advantages and disadvantages of e-learning was created on the basis of more or less adequate observations and opinions of the users of the systems of e-learning, selected by the authors of various publications and experts in this subject.

In order to meet the condition of profitability and efficiency of implementation of this form of development in personnel in the organization, here is important the awareness of its strategic using in the areas in which it is reasonable and may bring greater profits. It should not be treated as standard teaching tool. System oriented using of e-learning, adjusting it to the specificity of organization makes consideration of the long-term aims and predicting the scale of impact and repeatability (Wilkin, 2009, p.26).

The above proves, that e-learning may be treated as training and development tool, but also as an innovative instrument of institutional and social changes, which need to be seen as modifications of human behaviour patterns, social interactions, temporal aspect of social structure and institutions (Wilkin, 2009, p.25).

Conclusions

Polish and international researchers and experts (i.a. Janczyk, Sznirch and Wójtowicz, 2010, p.195.; Jelonek, Nowicki and Ziora, 2014), in their surveys discover, that e-learning is facing great opportunities in modern remote forms of education. It is significant, however, that e-learning needs to be supported by traditional forms and we should avoid applying it alone in the general education process.

Our research proves, that e-learning with its easy access to individual learning systems, brings particular advantages to such social groups as: disabled, working persons and citizens of small towns and villages. The respondents admit, that e-learning is the most efficient form of education for grown-ups and in such education areas, as trainings, professional courses, part-time learning, which is related to the lack of time for learning and lack of free choice of learning place and schedule. Major advantage of this didactical form is individualization of learning and easy, constant and fast access to the didactic materials. Disadvantages and limits of e-learning stressed by the respondents are also vital. The most commonly noticed disadvantage is weak stimulating for learning and lack of personal contact with lecturers and other students. This limit is caused by the fact, that humans are social beings, who need support and motivation provided by the direct contact with others. Majority of respondents assess their experience with e-learning as positive. They find knowledge received this way is equal to the traditional ways, and sometimes even higher.

In the consciousness of employers, as well as employees, existing of the need for constant and systematic development is obvious. At the same time, the need for training is understood. As mentioned in various sources (Wilkin, 2009) since several years educational activity of many adult Poles increases. Unfortunately, the process is selective, has relatively little scope and takes place mainly in a traditional way.

Conditions of development of the new forms of education unfortunately are not favourable, which is a result of a lack of knowledge and reliable information about these forms of education, as well as suspicion towards the new things. Even though e-learning is a didactic and technological innovation, so far not fully accepted, it seems that because of numerous disadvantages, it is worth being popularized and used in practice of teaching at various educational levels.

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