

E-LEARNING IN BUSINESS

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Abstract: *Training for employees improves work efficiency and for this reason companies should invest in their employees' development. Realising the training necessity is, however, only the beginning. The choice of an appropriate training leaves much doubt. Yet, choosing a method of education is the most difficult part of the process. Apart from traditional training – which is still the most popular one – Internet training gains in popularity. The choice between an e-learning and a traditional training happens to be complicated. It depends on many factors – the size of a company and its needs. A small company that needs a training for a few employees will need completely different solutions from a corporation which, having hundreds or thousands of employees to be trained, may find it beneficial to organise an internal training, information and communication system. This article shows advantages and disadvantages of both traditional and e-learning training, which should be considered by companies choosing methods of their employees' training.*

Key words: *e-learning in business, e-learning, training, employee education*

JEL classification: *A20, A29, I29, M53*

ELEKTRONSKO UČENJE U POSLOVANJU

Sažetak: *Obuka za zaposlene povećava efikasnost rada i zbog toga kompanije treba da ulažu u profesionalni razvoj svojih zaposlenih. Shvatanje neophodnosti obuke je, međutim, samo početak. Izbor odgovarajuće obuke ostavlja mnogo prostora za sumnju. Ipak, izbor metoda obrazovanja je najteži deo procesa. Pored tradicionalne obuke – koja je i dalje najpopularnija – Internet obuka dobija na popularnosti. Izbor između elektronskog učenja i tradicionalne obuke čini se komplikovanim. Zависи od mnogo faktora - veličine preduzeća i njegovih potreba. Malo preduzeće koje treba obuku za nekoliko zaposlenih zahtevaće potpuno različita rešenja od korporacije, koja imajući stotine ili hiljade zaposlenih za obuku, možda će smatrati korisnim da organizuje internu obuku, informacioni i komunikacioni sistem. Ovaj članak prikazuje prednosti i mane tradicionalne i obuke elektronskog učenja, koje treba uzeti u obzir od strane kompanija koje biraju metode obuke svojih zaposlenih.*

Ključne reči: *elektronsko učenje u poslovanju, elektronsko učenje, obuka, edukacija zaposlenih*

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1. INTRODUCTION

As one of distant learning forms, e-learning has been created to meet the needs of those who, because of some factors such as work or social conditions, are unable to take part in traditional forms of education. The development of e-learning can be divided according to the technology used and the way this teaching method is seen by the training participants. Therefore we can talk about consecutive generations of e-learning. Originally, e-learning meant an accurate reflection of the issues from training carried out traditionally, the only difference being in the Internet as a means of knowledge transfer. This is the first generation of e-learning. The second generation witnessed the introduction of interactive elements. Despite the fact that e-learning training was still a reflection of traditionally presented issues, the introduction of multimedia and interactive elements allowed the training to be made-to measure to meet the individual expectations and needs of clients. The third and the most advanced generation allows for an implementation of IT algorithms to create the most individual path of education possible. Undoubtedly, the potential of this type of education lets us plan employee training that will be fully automated and tailor-made to fit the individual abilities of the learning people as well as the needs of the company that they work for. Nevertheless, it is often the case that the model and the scope of employee training with the use of this education method stems from the company's needs generated by the type of business they are involved in, training needs, the company's attitude towards development, and the ability to spend a sufficient amount of money on training. The use of e-learning in company training is conditioned by a few factors. These factors have been distinguished in the report concerning the results of research into the European e-learning (Zajac, 2009). The report has shown five groups of development factors of this education method. Apart from technical and historical factors stemming from the form and issues of training, there are also economic factors and those coming from the strategy and management applied by the company. The degree and scope of using e-learning in employees' training depends on those economic factors and the form and strategy applied by the company.

2. E-LEARNING IN COMPANIES

Using e-learning in companies to train employees is beneficial for both the company and the employees. Among the company benefits is the fact that a course participant can take part in the training in their free time both at work and after it. Therefore, the problem of lowered work efficiency is avoided. Moreover, in the case of distant training there are no additional costs generated by the need to hire extra staff or to organise substitute employees for the time of the training. A company that uses e-learning to train their employees is able to automatically control the progress made by the trainees. Testing the level of

knowledge can take place as scheduled by the company department responsible for employee training. An employee can also plan the ends of subsequent stages and levels of a course. Such a situation takes place when an employee should obtain qualifications defined by the company. In such a case, there are e-learning courses designed in the way that completing one stage results in being granted access to next stages. In this way, completing the whole of the education cycle is not limited by any time restrictions. Moving to the next stage of the course – a more advanced one – is connected with the necessity to acquire knowledge and skills designed for a particular level of the course. As a result, an employee has an opportunity to complete several stages of the training in the time of their choice.

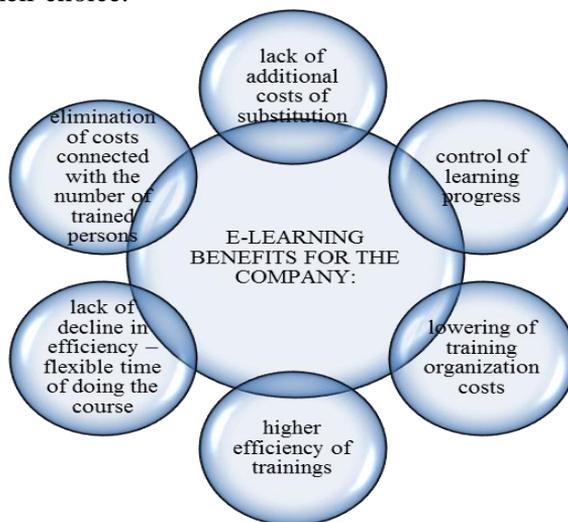


Figure 1. Benefits from e-learning for companies.

Using e-learning in companies has yet another, just as important advantage. It allows employers to train employees without the need to leave the current affairs and to participate in a training which takes place in one room. What is more, a once-prepared training can be used several times, irrespective of whether it is a small, medium or large company doing business internationally. Therefore, for example, information about a new technology or a new product of a company can reach all the departments in all the countries at the same time without the delays resulting from organising training that, traditionally, would take place at each company location. Training preparation is a one-time cost, irrespective of the number of the trained people. The need to train further groups of employees does not induce any costs connected with preparing a traditional training; it only requires starting the course for further users. Additionally, it enables a reduction of the employee training costs. E-learning

training is often cheaper than traditional one, especially when the same training needs to be repeated several times. It enables a reduction of the employer's expenditures for renting training rooms, printing teaching materials or – in the case of training taking place outside the company location – costs of accommodation, travel or allowances. A once-prepared training can be used many times. An employee who participates in an e-learning course is able to devote to it as much time as they need to acquire the necessary knowledge. In this way, the training takes a more personalized form, which is impossible in the case of a traditional training, especially when the training group is numerous. Consequently, the efficiency of training is higher, which is yet another benefit of e-learning training for the company taking advantage of it.

E-learning training in companies is also beneficial for the employees. One of the benefits is the training attractiveness. In most cases, distant training includes multimedia materials which allow for a better visualisation of the taught topics and, as a result, for better acquisition of the new knowledge and skills by the learners. Individual paths of teaching, obtained by adapting the place and time of the training to the trainee's capabilities, are another considerable advantage of this education method. Each employee can spend as much time on a given training element as they need in order to learn in. They can individually choose the time when they learn and the issues they should study, omitting the parts of the material they already know. The flexible time in which the employee can take part in the training brings benefits for the employee as well. They do not need to fear that having come back from a traditional training they will need to make up for the time spent there. However, one of the biggest advantages for the employee is the lack of geographical or time barriers in the access to interesting industry training.

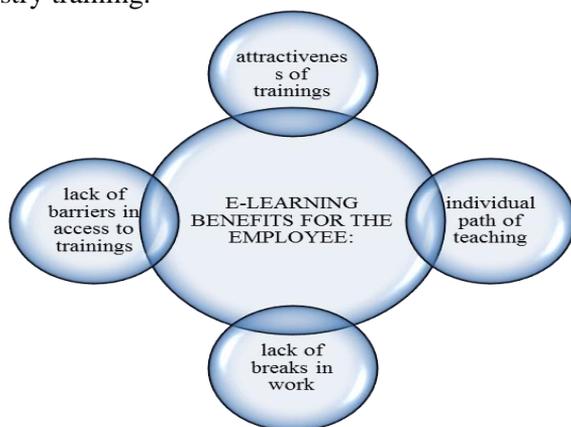


Figure 2. Benefits from e-learning for the employee.

The solutions of distant learning have also some disadvantages or limitations which influence resignation from initiatives leading to using this type of training. These disadvantages can be seen from the perspective of both the employee and the company. From the employee's perspective, especially older employees, insufficient knowledge of Internet technologies may be a limitation. Moreover, a real barrier is a lack of Internet access outside the work place. This will make it impossible to take advantage of the biggest e-learning benefits, that is, independence from the time and place of training. Some employees, particularly older ones, are convinced that what is traditional and has been tested is better. From there comes the lack of trust in other than traditional forms of acquiring knowledge. Employees may also be bothered by the lack of direct contact with a trainer, although, practically speaking, this is only an illusory limitation as training takes place under the supervision of a trainer who can frequently be contacted more easily because this is a remote contact not requiring presence in the same place. The most real and human barrier, however, is the lack of self-discipline among trainees. An employee has to take full responsibility for planning the training time as it is not regulated in any way.

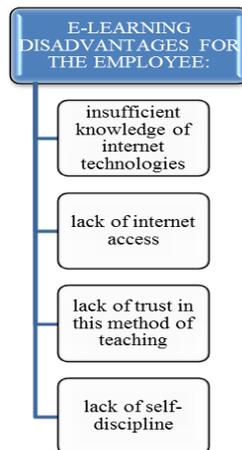


Figure 3. Disadvantages of e-learning from an employee's point of view.

From the company's point of view, another limitation in implementing e-learning is reflected in high costs of implementing this method of teaching in company. It is connected with some aspects related with the IT architecture itself. The implementation of a system for creating and managing training may sometimes generate high costs, depending on the chosen solution. However, it is a one-time expenditure. The costs that need to be taken into consideration in the long-time perspective are connected with creating additional workplaces. It

means organising the job of a system administrator, a course designer and trainers. In the case of smaller companies or companies with a limited budget for training, such a solution may seem less attractive than traditional training. One needs to bear in mind, however, that there is another solution. Instead of introducing a system of training in the organisation, a company can take advantage of solutions prepared by training firms and pay for access to an e-learning platform for employees. Not only does it let the company lower the costs of own infrastructure implementation and maintenance, but it also allows for using the full functionality of a learning platform. Among the employee training costs that need to be paid there are also the costs of buying an appropriate training or creating training that would meet the company’s needs.

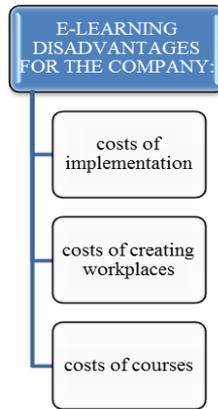


Figure 4. Disadvantages of e-learning from a company’s point of view.

Using e-learning to train employees is not always well-grounded. It always needs to be considered whether, due to a number of factors, a company would benefit more from a traditional or an e-learning training. Therefore, it is profitable to check the training efficiency. The efficiency of an e-learning training is measured with the use of the ROI (Return on Investment) indicator. It allows us to assess whether and how an undertaking connected with devoting financial means to e-learning training can influence the company’s financial results. It is possible to calculate the profitability indicator in a few ways. One of them lets to calculate ROI by comparing profits with expenditures (Hyla, 2007, p. 267):

$$ROI = \frac{\text{profits}}{\text{expenditures}} \times 100\%$$

However, not knowing the above data, but knowing only the e-learning and traditional training costs, we can calculate ROI in another way (Dąbrowski, 2008):

$$\text{ROI} = \frac{\text{total cost of traditional training} - \text{total cost of e-learning training}}{\text{cost of creating traditional training} - \text{cost of creating e-learning training}}$$

When calculating the costs of Internet training, one needs to pay attention to many factors not occurring with traditional training. The costs that need to be taken into consideration are the costs of IT infrastructure or the costs of adapting the existing infrastructure to the needs of serving the courses. As far as traditional training is concerned, high costs of specialised trainers and renting rooms for training need to be taken into consideration. Therefore companies with little experience in organising e-learning training can look for help from all kinds of training calculators available on the Internet. An example of such calculators has been shown in Figure 5.

ROI calculator for e-learning

By comparing the implementation cost of an on-site training project with the e-learning costs, the form allows calculating the ballpark ROI for e-learning.

Type of on-site training cost for the organisation	PLN net cost
Cost of training room (for the entire duration of the training)	<input type="text"/>
Transportation cost for the coach and/or trainees to the training site(total)	<input type="text"/>
Accommodation cost (total)	<input type="text"/>
Food and beverages cost during the training (total)	<input type="text"/>
Delegation costs (total)	<input type="text"/>
Cost of supplementary training materials along with the cost of their preparation	<input type="text"/>
Costs of drawing up training report	<input type="text"/>
Costs of training-related absenteeism	<input type="text"/>
Opportunity costs attributable to the absence of employees participating in the training	<input type="text"/>
Other costs of organising on-site training	<input type="text"/>
Type of e-learning cost for the organisation	PLN net cost
Cost of preparing material for e-learning-based training	<input type="text"/>
Costs of methodical and technical preparation for the e-learning based training	<input type="text"/>
Cost of e-learning platform	<input type="text"/>
Administration and technical support costs of e-learning	<input type="text"/>
Mentoring costs	<input type="text"/>
Cost of supplementary training materials to e-learning course along with the cost of their preparation	<input type="text"/>
Costs of drawing up the e-learning report	<input type="text"/>
Costs of training-related absenteeism	<input type="text"/>
Opportunity costs attributable to the absence of employees participating in the training	<input type="text"/>
Other costs of e-learning based training	<input type="text"/>
<input type="button" value="compare the costs"/>	

Figure 5. ROI calculator available online.

Retrieved from www.prestines.com/calculators/roi-e-learning/index.php

3. CONCLUSION

Many companies use traditional methods more frequently to train their employees. Traditional training carries a number of limitations, such as setting one place for the training. Employees have to stay in the training room and that, in the case of the training taking place outside the company venue, is connected not only with the costs of renting the room but it also generates additional accommodation or transport costs. In the case of traditional training, there is a time limitation. Employees have to be delegated from their workplaces for the time of the training and they need to leave their duties. Therefore, not only does the employer lose time for employees' training, but also the employee will need to make up for the tasks they would have completed if they had stayed in their workplace. These are the most visible disadvantages of traditional training and in some circumstances they might outweigh the benefits coming from employees' training.

E-learning, on the other hand, apart from evident benefits coming from the lack of training time and place limitations, has also some disadvantages. One of the often listed drawbacks is the considerate cost of purchasing or adapting the IT infrastructure to meet the needs of this method of education. However, it turns out that e-learning training is not more expensive than traditional one. Taking into consideration the Return on Investment indicator, quoted in this article, calculated for a traditional and Internet training, it can be concluded that Internet training, especially when a substantial number of employees need to be trained, are less expensive than traditional training when we calculate the costs of training for each individual. Moreover, integrating the e-learning system within the framework of the corporate portal can bring many more benefits to the company. Apart from the traditional training function, such a solution allows for the creation of a communication centre – between the employees as well as the company and its clients. Sometimes, it can also serve the function of a certifying and testing centre where knowledge and skills of employees taking part in training are tested, and where certificates granting access to certain resources are renewed and new employees are certified.

E-learning is “a model of teaching using technology to create, distribute and deliver data, information, training and knowledge in order to increase the efficiency of work and activities of a company”¹. In the present time of Internet technologies intensive development and the simultaneous lack of time, the

¹ Bet on development! Information and promotional campaign and counselling for adults on lifelong learning – second edition. A free publication co-financed with the European Union means within the framework of the European Social Fund. Retrieved from: <http://www.postawnarozwoj.uni.lodz.pl/admin/zdjecia/file/ebooks/przewodnik%20po%20e-learningu.pdf>

choice of such a training method may seem invaluable. Nevertheless, both traditional and e-learning training have their advantages and disadvantages and the final decision concerning the choice of the type of training should be made on the basis of the company's needs and capabilities analysis.

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