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MODERN ACTUAL PROBLEMS AND PROSPECTS OF FINANCING OF DISTANCE LEARNING OF PERSONNEL OF UKRAINIAN COMPANIES ON THE BASIS OF HIGHER EDUCATIONAL INSTITUTIONS

Abstract. Nowadays there is a deficit of qualified specialists in the labor market; therefore, the entities are forced to use internal training systemically and rationally. However, traditional internal personnel training and development methods not always are acceptable because they do not give the opportunity to organize simultaneous and equal training in territorially distributed company with rather small costs. Distance learning on the basis of higher educational institutions allows solving these problems.

The research of modern actual problems and prospects of financing of distance learning of personnel of Ukrainian companies on the basis of higher educational institutions is carried out in the work. In particular, the current trends of personnel training and development in Ukrainian companies are analyzed. The perspective condition and efficiency of use of personnel distance learning on the basis of higher educational institutions are estimated.

The analysis of the current trends of use of distance learning in Ukrainian companies allowed to make a conclusion that more than a half of respondents are guided by implementation of distance learning for the employees that, in turn, will allow to reduce expenses on their training. The assessment of perspective condition and efficiency of use of Ukrainian companies' personnel distance learning on the basis of higher educational institutions designated the need of its implementation. It is confirmed by the expected perspective growth of the annual average training cost of one employee training. At the same time, this cost is higher than the cost of distance learning in four times.

In general, the results of research will allow optimizing expenses on personnel training in Ukrainian companies that, in turn, will positively affect their profit, and, accordingly, the economy in the whole.

Keywords: distance learning, higher educational institutions, actual problems, financing, personnel.

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СУЧАСНІ АКТУАЛЬНІ ПРОБЛЕМИ ТА ПЕРСПЕКТИВИ ФІНАНСУВАННЯ ДИСТАНЦІЙНОГО НАВЧАННЯ ПЕРСОНАЛУ УКРАЇНСЬКИХ КОМПАНІЙ НА БАЗІ ВИЩИХ НАВЧАЛЬНИХ ЗАКЛАДІВ

Анотація. У роботі виконано дослідження сучасних актуальних проблем і перспектив фінансування дистанційного навчання персоналу українських компаній на базі вищих навчальних закладів. Зокрема, проаналізовано сучасні тенденції навчання й розвитку персоналу в українських компаніях. Оцінено перспективний стан і ефективність використання дистанційного навчання персоналу українських компаній на базі вищих навчальних закладів.

Ключові слова: дистанційне навчання, вищі навчальні заклади, актуальні проблеми, фінансування, персонал.

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СОВРЕМЕННЫЕ АКТУАЛЬНЫЕ ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ ФИНАНСИРОВАНИЯ ДИСТАНЦИОННОГО ОБУЧЕНИЯ ПЕРСОНАЛА УКРАИНСКИХ КОМПАНИЙ НА ОСНОВЕ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ

Аннотация. В работе выполнено исследование современных актуальных проблем и перспектив финансирования дистанционного обучения персонала украинских компаний на базе высших учебных заведений. В частности, проанализированы современные тенденции обучения и развития персонала в украинских компаниях. Оценены перспективное состояние и эффективность использования дистанционного обучения персонала украинских компаний на базе высших учебных заведений.

Ключевые слова: дистанционное обучение, высшие учебные заведения, актуальные проблемы, финансирование, персонал.

Формул: 2; рис.: 6; табл.: 2; библи.: 11

Introduction. Today most of the companies, which dynamically develop, try to decrease staff expenses without reducing its efficiency. One of the ways of work optimization is increase of competence and professionalism of workers. It is possible to involve new competent employees from the outside or to train own personnel for this purpose achievement. There is a deficit of qualified specialists in the labor market in present conditions; therefore, the entities are forced to use internal training systemically and rationally. However, traditional internal personnel training and development methods not always are acceptable. They do not give the opportunity to organize simultaneous and equal training in territorially distributed company with rather small costs, to give the knowledge to all employees at the right time without waiting for budget forming and the corresponding internal training, to create a common information space for educational group after training completion. Distance learning on the basis of higher educational institutions allows solving these problems.

The analysis of research and problem definition. The works of the following scientists are devoted to personnel distance learning in the companies nowadays: I. I. Mazur, A. V. Karpov, T. M. Desyatov etc. However, the questions devoted to personnel education cost optimization in the companies by means of distance learning on the basis of higher educational institutions remain insufficiently studied nowadays.

The work objective is research of modern actual problems and prospects of financing of distance learning of personnel of Ukrainian companies on the basis of higher educational institutions.

It is necessary to solve the following tasks for objective achievement:

- analyzing the current trends of personnel training and development in Ukrainian companies;
- estimating the perspective condition and efficiency of use of personnel distance learning on the basis of higher educational institutions.

The results of the research. Consumers of distance learning can be divided between corporate sector, educational sector and individual training consumers. In corporate sector, the interested companies are those, which need to provide regular training of employees, especially if the company has branches. In corporate sector and private educational structures sector, it is possible to mark out the following main categories, to which the majority of distance courses belong: studying of entity's product line and corporate standards by new employees; development of various skills; training in software products; training in various norms, rules and standards; financial accounting and legislation [1].

Distance learning application has no industry restrictions, and efficiency of the method depends on each specific industry. Application of distance learning in corporate sector is in the lead in the following industries: information technologies – 22%; personnel management – 16%; client servicing – 14%; accounts and marketing departments – 9%; engineering knowledge – 3%; other industries – 27% [2].

It is possible to use various methods for determination of efficiency of personnel distance learning in the companies: observation, experiment and survey.

In particular, survey is the most reasonable one from the point of view of information collection in this case. Survey can be conducted in oral form, by phone or by mailings. At the same time, survey can be structured and unstructured. The researches, conducted within the survey, can be disposable and reusable [3].

It is necessary to determine general population, method of selection forming and selection volume before to conduct survey.

The target segment of research is considered general population. In this case, heads and commercial directors of the companies are general population [4].

Concerning methods of selection forming it should be noted that probabilistic and not probabilistic approaches could be used at the same time. In the first case, all sample units have the known probability to be included into selection, and in the second case, this probability is unknown.

Probabilistic selections include free ones, standard ones, method of concentration and method of quotas. In particular, free selection is formed subjectively from a line item of the minimum expenses of time and efforts of the researcher, availability of respondents.

Standard selection is formed taking into account the few characteristic elements of general population (selection, which volume is much less, than is required for a research, is initially formed. Than it extends during the survey [5].

The method of concentration assumes selection formation taking into account the most important and essential elements of general population, based on position of qualified specialists and experts concerning selection structure.

Method of quotas is the determination of number of respondents' groups, who have certain characteristics (sex, age, etc.). Proceeding from these data the quotas, which are distributed between interviewers, who carry out the choice of respondents on these quotas, are calculated [6].

Not probable selections include arbitrary ones and standard ones. In particular, arbitrary selections can be presented in the form of simple ones, group ones, multistage ones and method of beds. So, the probability to be selected is known for all units of the general population for the simple selection (a choice by means of random numbers or by lottery).

In the group selection, the general population is decomposed on separate groups (clusters). Further, the random selection (one-step approach) is carried out in each group. In multistage selection, its formation is carried out in several stages, and the cluster selected at preliminary stage represents set of units of the following stage.

In the method of beds, the general population is divided into groups based on the selected feature, which characterizes each unit of the general population. Further, the selection is created for each group with the help of random method [7, 8].

There is also a possibility of definition of selection by means of the statistical method, which allows calculating it most precisely in uncertainty conditions.

The selection volume is calculated by means of the statistical method as follows [9, 10]:

$$n = \frac{z^2 pq}{e^2}, \quad (1)$$

where n – selection volume;
 z – normalized deviation;
 p – defined selection variation;
 $q = 1 - p$;
 e – admissible error.

For example, the approximate total amount of respondents makes 500 persons.

If the established level of results' accuracy of makes 10%, and p and q due to the lack of information on a variation are considered equal 50:50, then the selection volume will be the following:

$$n = \frac{1,96^2 * 50 * 50}{10^2} = 96 \text{ persons.} \quad (2)$$

The leading Ukrainian companies – banks, insurance companies, financial organizations, car dealers, retail trade networks, etc. participated in survey.

The results of the survey concerning cooperation of companies with external personnel training and development providers are shown on fig. 1.

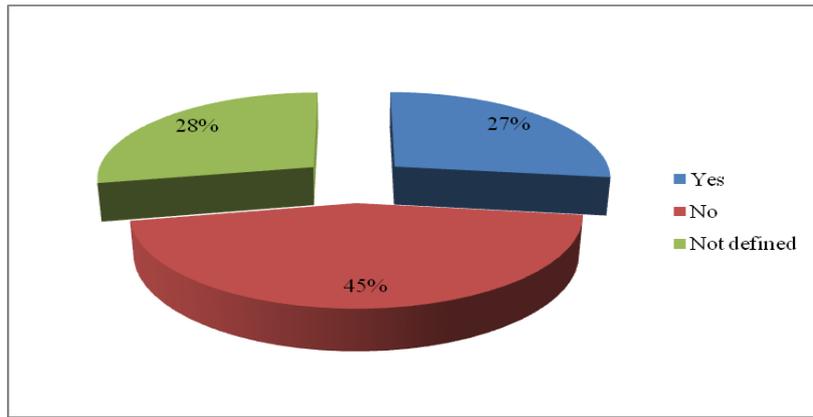


Fig. 1. Willing of cooperation of Ukrainian companies with external personnel training and development providers
Source: Compiled by authors on the base of the survey

Fig. 1 shows, that 45% of the interviewed heads of the Ukrainian companies refuse from external providers of personnel training and development and plan to cooperate with higher educational institutions. 27% of the companies plan to cooperate with external personnel training and development providers. 28% of the companies are not sure concerning such cooperation.

Refusal of cooperation with external personnel training and development and willing of cooperation with higher educational institutions providers are caused by optimization of training and development expenses (fig. 2).

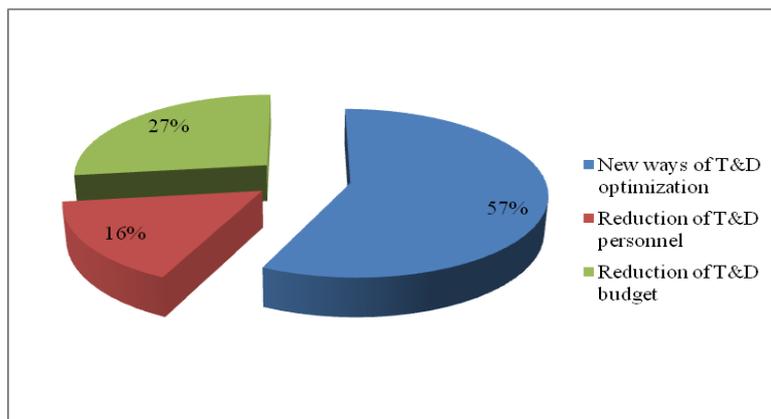


Fig. 2. Optimization of personnel training and development expenses in Ukrainian companies
Source: Compiled by authors on the base of the survey

The survey showed that more than a half (57%) of the interviewed heads of companies now are in search of new methods of optimization of personnel training and development expenses, in particular, they are going to cooperate with higher educational institutions.

Nearly a half of respondents reduce the budget connected with personnel training and development; 16% from the interviewed companies reduce costs of personnel training and development.

Respectively, the tendency of development of personnel distance learning on the basis of higher educational institutions is observed at the Ukrainian companies (fig. 3).

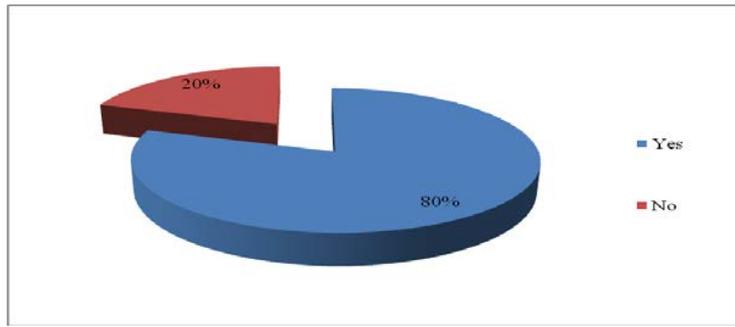


Fig. 3. Prospects of development of in-house training in Ukrainian companies
Source: Compiled by authors on the base of the survey

Fig. 3 shows that most part of the interviewed companies (about 80%) plan to develop the personnel distance learning on the basis of higher educational institutions in 2018.

Many heads of the companies consider implementation of distance learning on the basis of higher educational institutions in processes of personnel training and development (fig. 4).

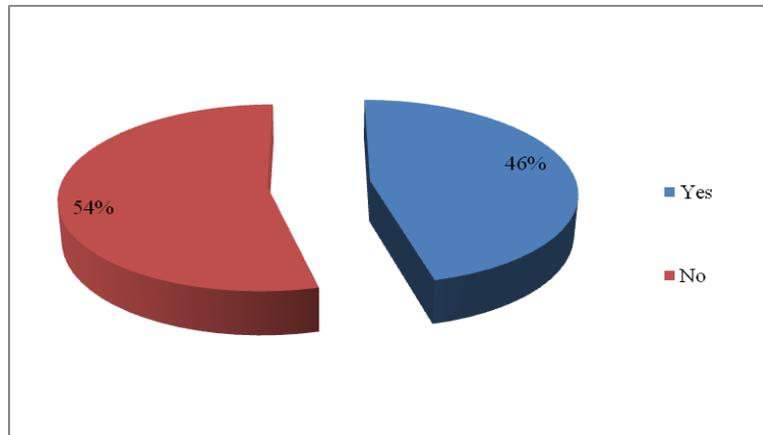


Fig. 4. Prospects of use of personnel distance learning on the basis of higher educational institutions in Ukrainian companies
Source: Compiled by authors on the base of the survey

Therefore, 46% of respondents plan to use personnel distance learning on the basis of higher educational institutions in Ukrainian companies already. This tendency is observed because heads of the companies trust in a possibility of reduction of costs connected with personnel training and development (fig. 5).

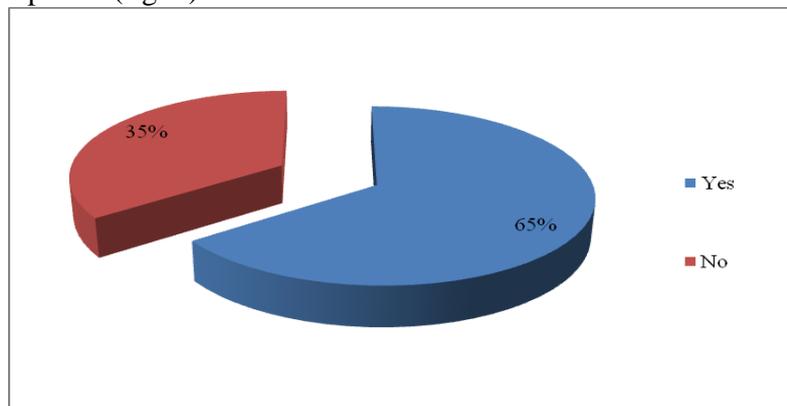


Fig. 5. Trust of the heads of Ukrainian companies in optimization of personnel training and development expenses
Source: Compiled by authors on the base of the survey

So, 65% heads of the companies trust in capability of personnel distance learning on the basis of higher educational institutions to optimize training and development costs and see it possible in the companies.

It is confirmed by experience of branches of the foreign companies, which are functioning in Ukraine and have already implemented practice of personnel distance learning on the basis of higher educational institutions (fig. 6).

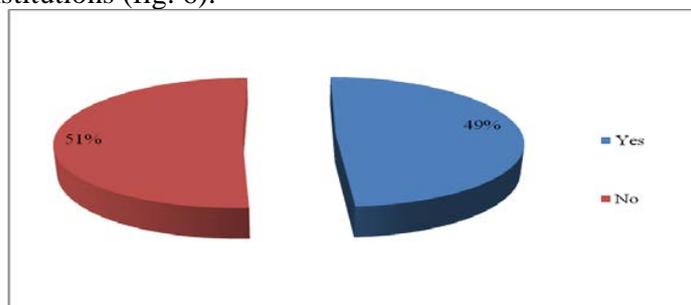


Fig. 6. Experience of implementation of personnel distance learning on the basis of higher educational institutions into practice of branches of the foreign companies, which work in Ukraine
Source: Compiled by authors on the base of the survey

A half of the interviewed foreign companies (49%) reported about availability of positive experience of implementation of personnel distance learning on the basis of higher educational institutions, and the second half of respondents had no experience in this direction.

Most the companies consider that the following solutions of distance learning can be actual in 2018: distance courses on the basis of higher educational institutions (65%); own systems of personnel distance learning (60%); finished distance courses (11%). At the same time, a half of the interviewed companies (49%) did not provide the budget on distance learning in 2018 yet.

In general, carrying out of distance learning is less costly anyway, irrespective of the number of the studying persons. Even if the quantity of the studying persons is less than 100 ones and the class lasts less than an hour, e-learning all the same remains for more than 40% less costly, than training with the teacher because of the hidden expenses. At the present stage, the price benefit of distance learning becomes even more noticeable; the economy reaches 78%.

The report of the Elearning Guild Company by the results of research of the market of systems of distance learning was published in March 2017 (more than 24 000 experts in the field of distance learning were interviewed). The following main conclusions were made.

1. The cost of system of distance learning for one person in large corporations makes from \$15,11 to \$57,02.
2. SkillSoft satisfies the needs for personnel training for big corporations better than others (more than 5000 studying employees).
3. 29,6% of the interviewed companies plan to update system of distance learning, and 10,7% of the companies plan to change its supplier, in particular, want to cooperate with higher educational institutions.
4. Moodle (Moodle!) came out on top in popularity and requirements satisfaction in the companies, which include to 5000 employees.
5. 11% of respondents declared that they did not return the investments into system of distance learning.
6. SumTotal is the most popular system of distance learning in corporations with the number of workers over 5000.
7. 21% of respondents use more than one system of distance learning.
8. SAP and KnowledgeImpact showed the best result in return of distance learning investments [11].

Concerning perspective condition and efficiency of use of personnel distance learning on the basis of higher educational institutions in Ukrainian companies it is offered to use forecasting of future average level of expenses on training of one employee. It is offered to use the regression

analysis as forecasting method proceeding from the fact that this approach allows to receive the most exact results in uncertainty conditions.

Basic statistical data concerning average level of expenses on training of one employee in Ukrainian companies for 2013–2016 are shown in table 1.

It is possible to see from table 1 that the average level of expenses on training of one employee in Ukrainian companies increased by 88,6% in 2014 in comparison with the previous 2013. Nevertheless, this indicator decreased by 8% in 2015, and reduced for 13% in the following 2016.

Table 1

Tendencies of change of the average level of expenses on training of one employee in Ukrainian companies during 2013–2016

Year	Average level of expenses on training of one employee, \$
2013	109,6
2014	206,7
2015	189,8
2016	164

Source: authorial calculation

Considering the nonlinear tendency of change of the average level of expenses on training of one employee in Ukrainian companies during 2013–2016, forecasting is performed by means of the function "Growth", which is built in the Microsoft Excel spreadsheets. The results of forecasting are shown in table 2.

It is possible to see from table 2 that step-by-step increase in expenses on training of one employee of Ukrainian companies is expected for the next 5 years. At the same time, stable annual growth rate of these expenses will make about 12%.

It testifies the need of implementation of personnel distance learning on the basis of higher educational institutions that, in turn, could give the opportunity to reduce expenses on its training practically in four times even on the example of the current 2017 proceeding from data concerning training cost in the largest corporations of the USA.

Table 2

Perspective values of the average level of expenses on training of one employee in Ukrainian companies for 2017–2019

Year	Average level of expenses on training of one employee, \$
2017	215,8
2018	241,5
2019	270,2
2020	302,3
2021	338,3

Source: authorial calculation

Conclusion. Thus, the following results were received during the work carrying out.

1. The analysis of the current trends of use of distance learning in Ukrainian companies allowed to make a conclusion that more than a half of respondents are guided by implementation of distance learning for the employees that, in turn, will allow to reduce expenses on their training.

2. The assessment of perspective condition and efficiency of use of Ukrainian companies' personnel distance learning on the basis of higher educational institutions designated the need of its implementation. It is confirmed by the expected perspective growth of the annual average training cost for one employee. At the same time, this cost is higher than the cost of distance learning in four times.

In general, the results of research will allow optimizing expenses on personnel training in Ukrainian companies that, in turn, will positively affect their profit, and, accordingly, the economy in the whole.

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