

**PEDTR 2019****18<sup>th</sup> International Scientific Conference “Problems of Enterprise Development:  
Theory and Practice”****USE OF LEARNING DIGITAL PLATFORMS IN RUSSIAN  
ENTERPRISES TO TRAIN STAFF**

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***Abstract***

In today's innovative economy, many companies need to use all kinds of resources more efficiently. In its turn, the rapid development of technique and technology poses to the enterprise management the tasks of constant personnel development, because the staff of the company is the main resource. Therefore, enterprises need to develop employees but it is also required to economise. There is a way to reach a compromise by using learning digital platforms. This compromise is the use of training digital platforms. The object of this study is the system of personnel training at Russian enterprises in the conditions of innovative economy with the use of training digital platforms. The aim was to analyze the theoretical and practical aspects of the use of digital platforms for training in enterprises and to propose ways to improve the use of this technology. This goal made it necessary to solve a number of problems: to determine the essence and content of training digital platforms for training personnel in the enterprise, to analyze and evaluate the use of digital platforms in Russian companies and to propose ways to improve the use of digital platforms for personnel training. The study is aimed at increasing the efficiency of training digital platforms when training personnel in companies.

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## 1. Introduction

In conditions of innovative economy many companies need to use all kinds of resources more efficiently. In its turn, the rapid development of technique and technology poses to the management of enterprises the tasks of constant development of personnel, because the staff of the company is the main resource. Thus, there is a need for continuous staff training and development. Therefore, enterprises need to develop employees, but they also have to economize. There is a way to reach a compromise between employee development and cost savings for training. This compromise is application of the training digital platforms (TDPs) which allows to save and improve skills and competences of personnel in the conditions of innovative economy.

Corporate employee training is one of the main areas of TDPs application. There are three main types of personnel training:

- Preparation, the purpose of which is obtaining necessary knowledge and skills and also training the ways of communication directed to performance of certain production tasks plus further development of knowledge skills abilities and ways of communication as the base for further professional training;
- The retraining, that is knowledge, abilities and skills acquisition and mastering in connection with change of profession or work requirements;
- The professional development, assuming improvement of professional knowledge and abilities, i.e. expansion of knowledge, abilities, skills and ways of communication to meet modern production requirements and also for stimulation of professional growth.

Therefore, the application of TDPs is an environment for comprehensive management of the training process in the enterprise. It gives HR department the opportunity to implement various options of corporate training of employees and the need for training may be identified. Using TDPs you can:

- Perform pre-testing of employees to verify knowledge of certain material;
- Train the employees of the enterprise and make evaluation based on the results;
- Train new employees during the adaptation period or with specific officials.

Thus, the use of TDPs offers many possibilities:

- Unlimited number of employees training even from geographically remote areas which is especially relevant when the task is to train a large number of employees;
- Training without leaving the workplace in the course of production activities, when it is enough for the employee to simply enter his virtual office, where all necessary materials have already been collected for him;
- Organization of the training process in the most convenient way for employees: anytime, anywhere, from mobile devices, according to individual schedule;
- Eliminating the need to allocate or rent premises and pay for the travel of employees;
- Lower cost of preparation as the use of TDPs allows to reduce the budget for preparation by about 30-40% compared to face-to-face courses;
- Increase of professional level uniformity in the enterprise;
- Continuous training of employees;
- Maintaining up-to-date knowledge of enterprise products and services;

- Accumulation and transfer of experience and knowledge of the company;
- Development and strengthening of corporate culture of the enterprise’;
- Carrying out prompt cross-sections of the professional level of employees.

## 2. Problem Statement

The introduction of TDPs in an enterprise often presents a number of organizational challenges:

- Line managers react negatively to the potential implementation of TDPs so it is important to explain the benefits that a division can have from their use;
- The material of the selected TDPs should not only be professionally oriented, but should also be visible, convenient and clearly structured;
- Lack of motivation on the part of the enterprise personnel to use TDPs;
- Lack of sufficient control over the application of TDPs in the enterprise: clearly planned deadlines, regular stocktaking, continuous monitoring of the enterprise 's training needs;
- Lack of interaction between the departments engaged in the implementation of the project;
- Insufficient financial security of the enterprise for the use of TDPs.

This indicates the urgent need for more systematic and careful implementation of this type of digital technologies into the work of enterprises, but there is no doubt about the need to use digital platforms in the activities of enterprises. The digital platform is a digital form of organization of interaction between service providers and consumers which allows to minimize the costs and to accelerate the process of information exchange between two parties (Karacay & Alpakan, 2019). Moreover, it allows to monitor and evaluate the result. A number of authors confirm that the use of digital platforms and, in general, digitalization, has a positive impact on employee productivity, as it improves the quality of work and accelerates the workflow. In addition, active Internet users form the majority of the population in many countries (Verma, Kumar, & Ilavarasan, 2017), so it is necessary to take advantage of this approach. The data presented by foreign and Russian researchers confirm that digital platforms are widely used in the banking sector, in production, in agriculture, in the transport sector (Kusumawati, 2018; Jakosuo, 2019; Efimov, Pogorelova, & Efimova, 2019). Learning digital platforms are widely used in higher educational establishments (Aldoshina, Knyazeva, & Nikolaev, 2019). The use of learning digital platforms in personnel training in Russian companies has not been much studied.

It takes place when the role of digital learning platforms as means of production of knowledge and forms of technological solutions is becoming so great that it is already goes beyond classical training and becomes indispensable in the studied sphere improving the efficiency of the enterprise. Thus, a digital learning platform is a powerful communicative tool which creates educational services and which is used for studies and training of the personnel (Eichhorst, Hinte, Rinne, & Tobsch, 2017).

All of the above mentioned suggests that the potential of digitalization technologies for staff training requires additional study. Due to this fact the focus of this article is learning digital platforms.

## 3. Research Questions

Some shortcomings in the use of this training format in Russian enterprises have been found:

- Necessity to interest employees and maintain their interest in self-training;

- Low level of interactivity in application of TDPs compared to face-to-face classes and trainings, as in real communication it is easier for the trainer to manage interest of listeners and to keep focus on the topic;
- Insufficient consideration of identity types of TDPs users;
- Possible technological problems (system access, software compatibility, configuration and communication failures during TDPs operation);
- Quite high cost of some TDPs.

The shortcomings are well overcome. Thus, the application of TDPs in Russian enterprises should be quite viable and should provide many opportunities for employee training.

#### **4. Purpose of the Study**

The object of the study is TDPs system for personnel training at Russian enterprises in conditions of innovative economy. The aim of the work was to analyze the theoretical and practical aspects of the application of TDPs at enterprises for personnel training and to propose ways to improve the use of this technology.

The objective has led to a number of challenges:

- Define the essence and content of the TDPs for training personnel in the enterprise;
- Analyze and evaluate the use of TDPs in Russian companies;
- Propose ways to improve the application of TDPs for the training of enterprise personnel.

The aim is to increase the efficiency of training digital platforms when training personnel in companies in order to enable people to work in a modern innovative economy.

#### **5. Research Methods**

Measuring the effectiveness of using TDPs system is necessary to assess the TDPs impact on the final organization performance. In general, it is necessary to assess the efficiency of TDPs for personnel training at Russian enterprises in a comprehensive manner.

To do this one should:

- Collect feedback from employees;
- Compare the achievements of distance and face-to-face learning;
- Regularly conduct sections of knowledge;
- Track the percentage of staff who have successfully completed training program relative to the total number of participants;
- Monitor improvements in employee and enterprise performance.

The criteria for evaluating the effectiveness of training in the classic employee model were first defined by four levels: 1 level – “Participant Response”, 2 level – “Learning”, 3 level – “Behavior”, 4 level – “Results”. Later a qualitatively new fifth level of valuation to this model with the title "Return on Investment" (ROI) was added. ROI calculation (Return on Investment) determines return on investment in training activities; to choose programs reasonably by comparing their effectiveness (Trainev, Gurkin, & Trainev, 2012):  $ROI = (\text{Income expense on training}) / (\text{Costs of training}) * 100\%$

The above method allows to assess the financial efficiency of investing in employee training in enterprises.

## 6. Findings

The functional point of the TDPs can be divided into three parts:

- Direct training management: management of competences, access to educational materials, accounts;
- Automated formation of training programs, logging of students “activities”, their technical and methodological support, generation of reports, as well as analysis of the training process;
- Ensuring the interaction of all participants (forum, blog, e-mail, chat, video conference, social networks);
- Creation of training materials.

At the first stage (analysis stage), the objectives of the TDPs implementation are determined. These can be provision of individual training approach, optimization of costs for personnel training, maintenance and accumulation of existing experience in the enterprise, personalization of the training process, reducing workplace errors, conquest of new market segments. At this stage, the specifics of the enterprise and the target audience are important, as well as an analysis of the existing training system.

In the second phase (planning phase), the company should make an important strategic decision regarding the choice of a suitable TDPs. For this, it is necessary to assess the financial capabilities of the enterprise, the available technical and organizational infrastructure. Thus, it is at this stage that the most appropriate training digital platform is selected.

At the third stage (development stage) the optimal configuration of the software and technical complex is directly formed. Technical equipment is being installed, the database is being structured, the necessary software is being installed and training content is being created.

At the fourth stage (implementation stage), a test group of TDPs users is determined and employee training is established.

TDPs have to:

- Provide access to the virtual classroom for both the trainer and the trainee, as well as bring students together according to common characteristics;
- Have functionality, that is, have the necessary options, including forums, chat rooms, course management and analysis of trainee activity;
- Download materials of any format;
- Monitor the reporting process;
- Have stability, i.e. a high degree of stability under different operating conditions and load depending on the degree of user activity;
- Be easy in using and administrating;
- Have 100% multimedia, i.e. the technical capabilities of the digital platform should provide for text files, graphic files, video, audio, flash animation, 3-d graphics;
- Have high quality technical support.

The review of the Russian TDP market allows to identify the main players in this sphere. These are the iSpring Online, Mirapolis LMS, WebTutor and LMS Moodle Cloud platforms.

Management company Alfa Capital, Travelline and Paolo Conte have implemented iSpring Online for training all employees of the company and partner banks, so 126 courses have been developed, including certification programs and stock market courses and leadership master classes.

Possibilities of iSpring Online:

- Unlimited cloud storage, where you can download any number of courses, tests, books, text documents and videos;
- Built-in platform for webinars, allowing to train employees of all branches simultaneously (records of webinars are preserved and they can be viewed at any time);
- iSpring Suite, with which you can quickly and without special training develop electronic courses, tests, video sections and interactive games directly in the PowerPoint;
- Machine evaluation, which allows you to collect an electronic test through iSpring Suite and assign it to your employees;
- Detailed statistics;
- Gamification with points and badges for successful completion of tasks;
- Integration with HR systems (1C, Boss Human Resources, Axapta, Navision, SAP HR and Oracle EBS);
- Mobile training launched from any device (laptop, tablet and phone).

Travelline aimed to automate the staff training system in the form of courses, tests and visual training, as well as reduce time on employee knowledge sections and put training on the stream. As a result of the introduction of iSpring Online, the enterprise managed to increase the conversion of employees, increase the indicator "income per employee," and, accordingly increase the income of the company. The company was also able to organize a personalized approach to training.

At Paolo Conte the introduction of this TDP helped to build an individual trajectory of employee development, and as a result, to form a strong team.

The Directorate of the Multifunctional Center (MFC) used a version of TDP iSpring Suite, because in addition to standard training videos it contains dialogue simulators to help develop communication skills of employees.

TDP Mirapolis LMS is part of a larger human capital management and HR process automation system. It helps automate staff selection, adaptation, training, and testing. Among Mirapolis LMS clients there are more large companies with a large number of employees: Gazprom, Sberbank, Rosatom, Russian Railways, Mail.ru.

Possibilities of Mirapolis LMS:

- Unlimited knowledge base with the ability to add any number of training materials (text documents, presentations and videos);
- Development programs with the ability to add training materials into one program and assign it to employees;
- Automatic evaluation with the ability to create a test in an online editor or import ready-made questions from QTI files;

- Mirapolis Virtual Room - special service for conducting and recording webinars;
- Report system with 120 templates;
- Platforms for communication (communities, forums and blogs);
- Integration with HR systems (SAP, Oracle and 1C).

The majority of WebTutor DPC users are large companies with a large number of employees and distributed network of branches. For example, they include Rosgosstrakh, Danone, Lukoil, Svyaznoy, Guarantor. This TDP in fact, is a comprehensive system of automation of processes of personnel management of the enterprise, as the process of training, selection, evaluation and development of personnel is automated.

Possibilities of WebTutor:

- Consolidation of users into groups by departments or branches;
- Integration with HR systems (1C, Boss Human Resources, Axapta, Navision, SAP HR and Oracle EBS);
- Using electronic tests for automatic evaluation of employees;
- Conducting and recording webinars;
- Motivation to learn through gamification (points and badges for courses);
- Generation of reports and analysis of training results;
- Exchange of information between employees and educators through chat rooms, forums and blogs.

Competition between enterprises is increasing, and the company whose employees possess relevant knowledge and are constantly developing will benefit. TDPs respond to the realities of time by saving financial resources and increasing visibility and flexibility in learning. They contribute to the mass dissemination of knowledge among employees and make training in an innovative economy more accessible than traditional face-to-face learning. Indeed, the preparation time when using TDPs is reduced by 30-40% compared to traditional face-to-face training, and the rate of material storage increases by 10-30%.

## 7. Conclusion

The analysis of the TDPs used in the Russian market proved their suitability for training the personnel of enterprises to work in the conditions of innovative economy. The effectiveness of the TDPs used shows the positive effect of investments in the establishment of remote training systems in the corporate sector.

The main recommendations for the use of TDPs in enterprises are as follows:

- Focus on what is important to know for the employee. A brief and clear presentation of the material is needed. The platform should not be too overloaded with information, otherwise it will be difficult to navigate;
- It is necessary to find material easily. If a user has to overcome long lists with dozens of attachments and folders to find the necessary information, it means that the system does not work. TDPs are designed to collect all training materials in one place, but it is also important to

help the user find useful materials quickly. In other words, if the time required to find materials is reduced employees will increasingly access the training platform;

- Focus on smartphone-based TDPs, as over 60% of employees use them for training. Users want to see easy-to-understand formats;
- The TDPs should be adapted according to the wishes of users (when and how it is convenient for them to learn, which formats should be used). In other words, it's worth giving users more freedom to choose content as it all promotes engagement;
- It is necessary to maintain the involvement of employees of enterprises through game formats, overall enhancement of interactivity and creation of a reward system;
- It is recommended to create a favourable psychological climate when conducting training in enterprises. In order to improve the effectiveness of TDPs the interaction of developers and teachers with psychologists should be envisaged;
- It is desirable to constantly apply TDPs for training of employees in the enterprise, without turning training into chaotic, emergency actions, initiated from time to time. After all, business is growing only when its creators and hired personnel are developing, and the lag in the conditions of strict competition leads to the collapse of the company;
- It is necessary to improve technical support, i.e. increase the technical capabilities of TDPs and create good telecommunication channels.

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