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THE IMPLEMENTATION OF DIGITIZATION IN THE HUMAN
RESOURCES AND DOCUMENT MANAGEMENT

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Abstract

The article discusses the main problems associated with the introduction of digital processes in the workflow of corporate personnel. Digitalization is a complex and multi – faceted process that requires a large amount of time and resources for effective implementation. In this regard, the authors emphasize that digitization captures all processes, absorbing systems at different levels. The article reveals the need for maximum transition of enterprises to an electronic accounting system, the use of various information technologies that simplify all accounting processes. The authors refer to measures to introduce this digital experience by the state and Supplement their proposals that are relevant and specific to private companies. The process of implementing digital personnel accounting is interesting for all companies, both small and large ones. Like any system, especially the one currently being implemented, digitization of human resources management has its advantages and disadvantages. However, this process is primarily positive for business.

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1. Introduction

Nowadays, almost all spheres of human life are associated with the development and use of information technologies, communications and databases. The introduction of universal digitization is a global process covering all the systems – from social to academic and technological ones.

The articulation and study of the problems of personnel accounting and digitization in the economics were carried out by the following scientists:

– personnel records - Ivanova and Vasiliev (2018), Mironenko (2014), Moiseev (2018), Popova (2012), Semenov (2007), Smirnov and Lukyanov (2019), Zaytseva (2010) and others;

– digitization in economics - Bukht and Heeks (2018), Daniltsev and Biryukova (2019), Dobrolyubova (2018), Lanshina et al. (2017), Orekhova (2018), Rozanova (2019), Sadovaya (2018), Sakharov and Kolmar (2019), Zaitsev (2019) and others.

Business processes digitization is aimed at technological changes due to optimization, efficiency and increasing level of all corporate operations stages. Modern business provides new opportunities implemented in virtual reality on digital platforms. An average transition to digitization of business processes involves three main stages:

– automation – media conversion from hard copies to electronic specialized storage, processing and further use programs;

– digitization – a company's business processes optimization using e-methods;

– digital transformation – digital economy-based maintenance of the entire company management system (data storage, production methods, management and decision-making system, etc.)

These digital processes ultimately merge into the financing and operating activities of companies by means of:

– electronic document management;

– electronic filing of declarations and reporting;

– electronic records in various authorities;

– database hosting;

– digital business processes;

– operating processes;

– knowledge management and others.

In recent years, the issue of automating such processes in order to simplify the personnel accounting system in companies has remained open. To introduce this digital experiment Russian law suggests the following measures:

– cost reduction provided by the introduction of electronic document management in personnel accounting;

– optimization of the documents required for personnel accounting within the company;

– amendments to the personnel accounting legislation;

– practical evaluation of various electronic personnel mechanisms.

The main documents of the pilot project in the framework of personnel processes digitization are the following:

- employment agreements;
- employment record books;
- time sheets;
- various notifications for employees;
- documents related to annual leave, business trips, sums paid out on account, etc.

The implementation of digital procedures aimed at simplifying personnel accounting is relevant for companies of various sizes, both for small and large organizations. Why does this issue remain open?

The main problem lies in regulatory barriers related to the legality of signing such important personnel documents as employment record books, employment agreements, orders (on hiring, dismissal, annual leave, business trip). Today, Article No. 160 of the Civil Code of the Russian Federation regulates legal arrangements between the parties by means of a transaction made using a personal digital signature. Thus, creating digital signatures for employees within the company, the latter thereby enhances the development and implementation of electronic personnel document management.

Another difficulty is represented by the current cost of the digital signature itself, and by the person responsible for its acquisition and prolongation. This issue should also be included in the pilot project under consideration in order to ensure the expenditure of personnel accounting integral digital component.

Digitization of any process is a full-fledged electronic mechanism with the same legal force as its hard copy. In this day and age, almost all companies have automatized their accounting systems. Large and medium-size companies use such programs as 1C, Navision, SBIS, SAP, while small organizations and individual entrepreneurs rely on various online services - Moyo Delo, Buchsoft, Elba, Kontur, etc. Digitization in the personnel accounting of a company includes several stages (Figure 1):

- primary stage – the whole process is based on paper records, even if the documents are in soft copies, their hard copies are necessary, as only in this case a business transaction is valid;
- current stage – used by most companies now. A company's business processes are automated, but the fact of business transactions is confirmed and kept in hard copies;
- innovative digital stage – maximizing electronic and digital technologies usage.

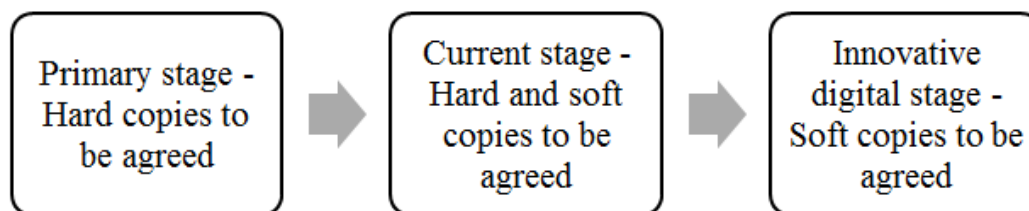


Figure 1. Stages of digitization of a company's business transactions

2. Methods

Digitization in companies has been implemented for several years and today companies have a real opportunity to maximize the use of latest electronic technologies in personnel accounting. The main areas related to the simplification of personnel accounting using digital processes will be the following:

- optimization of costs associated with paper record-keeping;

- labor saving;
- the ability to make timely adjustments to the supporting documents;
- development of an employees' common database to transfer the necessary information for various calculations related to their income (to the Pension Fund, Social Insurance Fund and tax authorities), as well as the possibility for companies to exchange data (e.g., between former and new employers) for sick leave, allowances and other calculations.

An important point for the companies, still focused on the transfer to electronic personnel document management, lies in determining of the entire electronic transformation process flow (Figure 2):

1. Employees' awareness of the procedure for maintaining the electronic personnel accounting:
 - in order to comply with all the legal standards companies need to develop in-house regulations (procedures), informing their employees about the transition to electronic interaction between employees and the employer;
 - the agreement of the parties should be initially confirmed by handwritten signatures;
 - fixing the procedure for electronic personnel document management in an employment agreement (supplementary agreement);

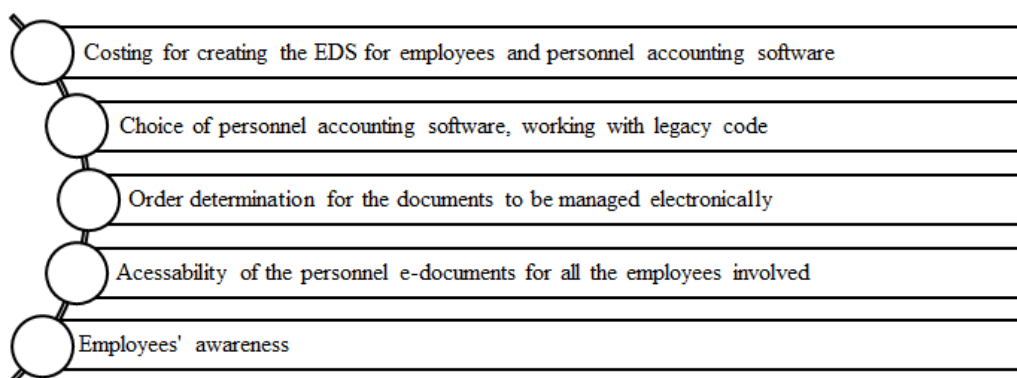


Figure 2. The process flow of the transition to electronic personnel document management

2. Prior documents to be transferred into non-legible form.

First of all, it is necessary to start with “general” documents of low significance, piled in large volumes (e.g., applications, introductory orders, explanatory reports, covering notes, etc.), personnel files (records, admission documents, employment references for payroll calculation). Thus, it is better to start the transition to digitization of human resources management with "low-risk" documents; minimizing the errors at the initial stage and ensuring gradual transition to electronic accounting in the company.

3. The procedure of the documents to be signed by employees:
 - development of the procedure for the digital signatures' usage by employees;
 - creation of special access to in-house regulations;
 - identification of the employee who signed and reviewed the documents;
 - creation of electronic workplaces (especially for the employees not provided with automated workplaces) aimed at signing and reviewing documents furnished by the employer (creating a personal account and its remote access usage, sending soft copies of the documents to the employees' personal e-mails).

4. Including the creation of unlimited digital signatures in a company's expenses:

- this signature can also be transitory, that is, leaving the place of work, the employee will no longer need to register a new EDS (digital signature); this significantly reduces both time and cash expenditures;
- the costs of creating the EDS for employees must be included in the economically sound ones to reduce the taxable profit;
- the following can also be enshrined in an employment agreement: if an employee fails to work for a certain period in a company and initiates termination of the agreement, these expenses are indemnified by the employee.

5. The choice of software for the implementation of personnel document management. The main criteria for a software product to have, in order to ensure efficient personnel accounting in a company, are as follows:

- personnel data consolidation;
- extended database for keeping the documents that are important for legal purposes;
- setting the automated paperwork, including internal documents, developed by the company itself;
- unified accounting and human resources management system;
- coordinated actions of all the personnel process participants.

3. Results

Digitization is an advanced system of informatization and automation providing independent analysis, forecasting and choice of an optimal solution to the problem.

Nevertheless, like any system, especially the one currently being implemented, digitization of human resources management has its advantages and disadvantages (Figure 3).

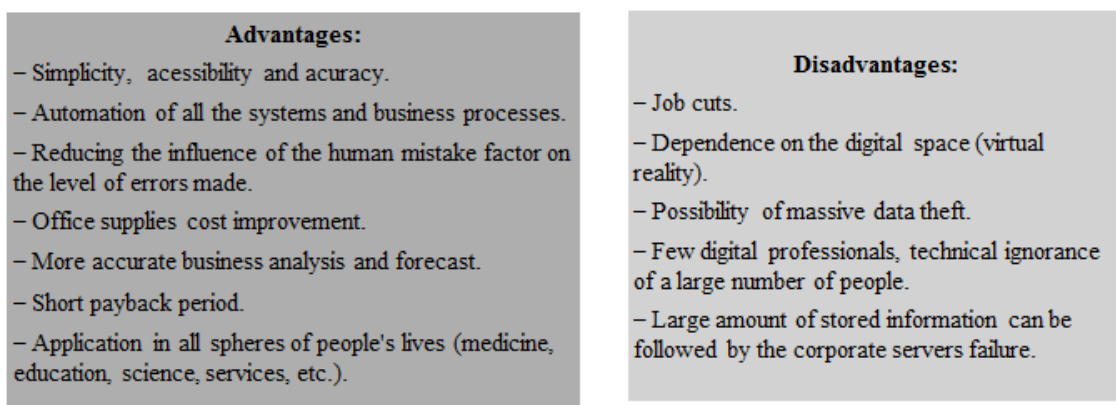


Figure 3. Advantages and disadvantages of the introduction of digital processes in the workflow of corporate personnel

The main advantages of the digitization of personnel document management:

- simplicity, accessibility, accuracy (with the common personnel documents database always ready to provide with the necessary information), minimizing such errors as not entering data into the database, structured storage;

- automation of all the systems and business processes – interaction of all the systems and processes of a company, data consolidation, timely obtaining and execution of documents by the employees;

- reducing the influence of the human mistake factor on the level of errors made – the ability to duly correct a mistake in the electronic document management, automatic filling of the important documents based on the data entered, the ability to process larger data volumes;

- office supplies cost improvement, with the transition to automated accounting allowing to optimize a company's costs;

- more accurate business analysis and forecast – all the users engaged will be able to receive the necessary analytical information for internal reporting;

- short payback period – productivity improvement, lower costs and increased transparency of internal accounting;

- application in all spheres of people's lives – data consolidation for all major structural sectors, accessibility of services, e.g., with ID only (medicine, education, science, services, etc.).

The drawbacks of the introduction of digital processes in the workflow of corporate personnel:

- job cuts (career staffers and accounting departments);

- dependence on the digital space – virtual reality;

- possibility of massive data theft, that could be caused by automation of all the processes; a need to protect the input information arises;

- few digital professionals, technical ignorance of a large number of people – advanced training and education of the all employees are required;

- large amount of stored information can be followed by the corporate servers failure – hence, increased costs for the purchase of more powerful equipment to maintain modern accounting programs.

Thus, the digitization of corporate personnel accounting systems lies in the universal and integral application of modern technologies in order to optimize accounting and maximize the benefits of digitization in all business processes.

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