

AUTOMATION OF ELECTRONIC DOCUMENT CIRCULATION

G'aniyev Xurshidbek Yoqubjon o'g'li

O'zbekiston Respublikasi Huquqni muhofaza qilish akademiyasi talabasi

khurshidganiyev577@gmail.com

Sayidova Mekhrinoy O'ktamjon qizi

Andijan State Technical Institute

Abstract

This article analyzes the nature of electronic document circulation, its advantages and implementation based on modern technologies. Consideration will be given to how electronic document circulation will create convenience for enterprises, state organizations and individuals. Also, the main stages of the introduction of electronic document circulation and the ways of its effective organization are considered.

Keywords: Electronic document circulation, digital documents, electronic archive of documents, automation, information technologies, document management.

Introduction

Electronic document circulation has become an important process for organizations and enterprises as a result of the development of modern information technologies. Traditional paper documents are replaced by electronic documents, and work processes are significantly simplified. This system allows to save time and resources while increasing efficiency in enterprises and organizations.

Electronic document circulation includes the process of creation, storage, exchange and archiving of documents in electronic form. Its introduction has many advantages and serves to optimize the performance of enterprises and organizations, improve the document management system, and increase the level of security.

The electronic document circulation system provides a number of important opportunities. This system is especially important in factories and production enterprises. Production processes require rapid exchange of documents, so electronic document circulation helps to increase production efficiency. One of them is speed. If previously documents were stored in paper form and it took a long time to deliver or process them, today electronic documents can be delivered to the right person in a few seconds. This will save time and increase productivity.

In addition, electronic documents have a high level of security, and there is little chance of their unauthorized change or loss. The authenticity of documents is guaranteed through special encryption methods and digital signature technologies. This increases the reliability of the data.





Electronic document circulation in factories and manufacturing enterprises simplifies the processes of tracking materials and orders, documenting production processes, and quality control. Due to automated document management, delays in the production line are reduced and resources are used efficiently.

In addition, the system allows remote management of documents. With cloud technologies, users can access and process documents from anywhere. The flow of electronic documents is monitored in real time, reducing the possibility of documents being lost or misinterpreted.

Another important aspect of the document management system is the environmental factor. As a result of using electronic options instead of paper documents, paper consumption is reduced, which, in turn, has a positive effect on environmental protection.

Several important stages should be taken into account when introducing electronic document circulation. First of all, the organization's needs and available resources are studied, and a suitable electronic document circulation system is selected. Next, the technical infrastructure is formed, that is, servers, software and information security measures are developed. After this process is successfully implemented, it is necessary to train employees to work with the new system.

After the testing process, the system is fully operational and continuously monitored. It is important to regularly update the electronic document circulation system and improve it based on modern technologies. What is electronic workflow?

Electronic document workflow automatically manages company records, sending, processing, archiving, and approving documents electronically. Unlike traditional work with paper documents, electronic systems allow for the rapid and secure flow of information within a company, regardless of size.

This means eliminating many manual operations, such as printing, physical signing, or transferring documents between company departments. Everything is done with the help of integrated IT



systems, which provide transparency, an audit trail, and control over documents at every stage of their circulation.

Electronic document circulation in a company - what does it consist of?

Electronic document workflow in a company involves digitizing and automating all the processes involved in document management, from creation to transmission, approval, and archiving. The critical steps of this process include:

Document creation - Electronic tools can create documents in integrated systems such as ERP. Instead of creating paper documents, users can generate digital invoices, contracts, or reports.

Document transfer - Documents can be automatically transferred between departments, employees, and management, with an entire audit trail. Electronic transmission eliminates the risk of lost documents and minimizes waiting time.

Approval - Electronic document workflow systems allow the automatic assignment of document approval tasks to appropriate people. Approval can occur in the ERP system, and each approval step is automatically recorded.

Archiving - Once the workflow is completed, the documents are stored in an electronic filing system, which allows easy retrieval and monitoring of all processed documents.

Electronic document workflow system – examples

Examples of the most used documents in the electronic document circulation system are invoices, orders, reports, vacation requests, or business contracts. Also worth mentioning are:

Purchase invoices: The system can automatically read a purchase invoice, assign it to the appropriate purchase order, send it to the accounting department, and send an approval notification to the relevant people.

Vacation requests: An employee can submit vacation requests online. They are then automatically sent to the immediate supervisor for approval, after which the system archives approved requests.

Contracts: Integrated workflow systems also enable managing a contract's life cycle - from creation through negotiation, approval, and storage of documents in the company's database.

Electronic document circulation: When is it an obligation?

The issue of electronic document circulation is familiar, but in some sectors, such as public administration, such systems have been made mandatory. Electronic document circulation: When has it become an obligation? In Poland, as of January 2021, the Law on Digitization requires public administration to implement e-documentation.





More and more private companies also choose to implement such solutions because of the legislation and the business benefits.

How can an electronic workflow in a company with ERP be implemented?

Implementing an electronic workflow in a company, especially one integrated with an ERP system, is a complex process that requires proper planning and the involvement of IT experts. Here are the critical steps in the implementation process:

Needs analysis - In the first stage, it is necessary to determine precisely what documents in the company will be digitized and what processes should be optimized. This allows you to identify what functions of the ERP system will be necessary to handle document workflow.

Selection of software - Various ERP solutions and systems dedicated to electronic document workflow are available on the market. The choice of the right tool depends on the company's specifics, size, and needs.

Data migration - The next step is to transfer the documentation to a digital system. This may include archiving and integrating existing paper documents into the new system.

Process automation - After implementing ERP software, a company can set up workflow paths to automate document creation, approval, and archiving.

Employee training - Training employees to use the new system is crucial in implementing an electronic workflow. Many companies must adequately prepare their employees for the change in their work.



Benefits of implementing electronic document circulation

Electronic document workflow in a company saves paper and space and offers many operational benefits. Here are the most important of them:

Increased work efficiency: Many automated processes have accelerated document circulation and significantly reduced waiting time for approvals and document execution.

Data security: Storing documents digitally eliminates the risk of losing or destroying them. Increased control over document access also ensures the protection of confidential information.

Cost savings: Implementing an electronic document workflow eliminates the need to print, store, and send paper versions of documents, leading to lower operating costs.

Transparency and auditing: An electronic document workflow system allows you to track every step of document processing, which is crucial during internal controls or external audits.

In summary, electronic document workflow is a crucial tool supporting modern companies' digitalization of business processes. Its integration with an ERP system allows you to gain complete control over documentation, automate processes, and significantly streamline work.



In the future, electronic document circulation is expected to be further developed and integrated with artificial intelligence and cloud technologies. With the help of artificial intelligence, it becomes possible to automatically classify documents, highlight important information and even make decisions about documents. Also, the use of blockchain technologies makes it possible to ensure that documents are not changed and increase their reliability. This makes it



possible to further automate work with documents, increase the speed of data processing and ensure ease of use.

Summary

Thus, electronic document circulation is an important system for modern organizations, which not only facilitates work processes, but also improves efficiency and optimizes business processes.

References

1. Alijonov Xabibullo Avazbek o'g'li, Termoplast avtomat moshinalarni tayyor maxsulotni olish jarayonini avtomatlashtirish, INNOVATIONS IN TECHNOLOGY AND SCIENCE EDUCATION, ISSN 2171-381X.
2. Alijonov Xabibullo AUTOMATIC IRRIGATION SYSTEM WITH TEMPERATURE MONITORING USING ARDUINO. UNIVERSAL JOURNAL OF TECHNOLOGY VOLUME 1 ISSUE1. 2023
3. Intelligent Mechatronic Systems Library of Congress Control Number: 2012950394 Springer-Verlag London 2013
4. Alijonov Xabibullo Avazbek o'g'li, Termoplast avtomat moshinalarni tayyor maxsulotni olish jarayonini avtomatlashtirish, INNOVATIONS IN TECHNOLOGY AND SCIENCE EDUCATION, ISSN 2171-381X.
5. Alijonov Xabibullo Avazbek O'g'li, . (2023). USING MODELS OF ELECTRIC ACTUATORS IN THE FACTORY. The American Journal of Engineering and Technology, 5(11), 15–24. <https://doi.org/10.37547/tajet/Volume05 Issue11-04>
6. Alijonov Xabibullo, & Xoshimov Dilmuhammad. (2023). SUYUQLIKLARDA SATH O'LCHASH USULLARINI AVTOATLASHTIRISH. <https://doi.org/10.5281/zenodo.8144466>
7. Xabibullo Alijonov, Azamov Bahromjon, & Abzalov Kamoliddinxo'ja. (2023). AUTOMATIC IRRIGATION SYSTEM WITH TEMPERATURE MONITORING USING ARDUINO. <https://doi.org/10.5281/zenodo.8144461>
8. Xabibullo Alijonov. (2023). INTELLIGENT ELEVATOR CONTROL AND SAFETY MONITORING SYSTEM. <https://doi.org/10.5281/zenodo.8144452>
9. Alijonov Xabibullo, Xoshimov Dilmuxammad, & Muxammad Aminov. (2023). AUTOMATIC IRRIGATION SYSTEM WITH TEMPERATURE MONITORING USING ARDUINO. <https://doi.org/10.5281/zenodo.8018631>.
10. Termoplast avtomat mashinalarni tayyor maxsulotni olish jarayonini avtomatlashtirish. AX Avazbek o'g'li, IM Zoxidjon o'g'li, IM Kozimjon o'g'li... - Innovations in Technology and Science Education, 2023
11. AVTOBUS TRANSPORTINI BOZOR SHAROITIGA RIVOJLANTIRISH STRATEGIYASINI ISHLAB CHIQISH
12. Alijonov Xabibullo Avazbek o'g'li, Fayzullayev Zafarbek Farxod o'g'li, Muxammad Aminov Abrorbek Dilshodbek ,GREENHOUSE HEATING SYSTEMS BASED ON GEOTHERMAL ENERGY Vol. 2 No. 4 (2024): EJMTD.