



THE ROLE OF INFORMATION TECHNOLOGY IN THE PHARMACEUTICAL INDUSTRY.

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Abstract: Discussion of the direction of using information technologies in the organization of pharmaceutical activities, the management of the economy of a pharmacy enterprise, in pharmaceutical production and business.

Among the main directions of development of modern information technologies in ensuring the development of the pharmaceutical business are:

1. Workflow automation
2. Pharmaceutical production technology management
3. Automation of banking operations

Workflow automation

The introduction of workflow automation systems (word processors, etc.) leads to the emergence of the concept of "electronic document" and "paperless technology".

"Paperless technology" involves the complete processing of documents in electronic form, that is, completely abandon the use of such physical media as paper.

Documentation in this schema provides the following benefits:

1. minimum expenses for stationery (forms, paper, stationery);
2. The process of creating documents is accelerated due to the possibility of including fragments from other documents in it and the possibility of editing an already existing set of text.
3. there is no need to allocate special premises (archives) and special furniture, bulky folders, etc.;
4. the process of searching for the desired document is accelerated, due to the search by keywords, search among several documents;
5. it becomes possible to organize joint work of several employees or even departments on one document;
6. there is no need for expensive means of protection against unauthorized access (safes, etc.), since only a limited circle of people can be granted access to a document using passwords, etc.;

Due to the transition to the electronic version, important documents become easily accessible to persons who do not have official permission to them, this is one of the problems that has appropriate solutions.

Production technology management

On the basis of computers and microprocessors, automatic and semi-automatic lines for the production of products have now been created. The use of such lines allows freeing up personnel for solving other tasks, increasing the volume and quality of products.

In industries that do not have automatic lines, computers are widely used at individual stages of production, in particular, in product quality control.

The use of computers in production makes it possible to eliminate technological errors and improve the quality of work of workers.

The obvious advantages of "electronic banking" are as follows:

- Prompt implementation of banking operations;

No need to visit the bank in person;

2 prospects for the development of information technology in the pharmaceutical industry

Today, the world's leading pharmaceutical companies spend about \$20 billion a year on information technology, but rarely get the full return on these investments. The majority of companies' IT resources are directed to cost-cutting technologies—supply chain management, transaction processing, support services—and more and more of these technologies are outsourced to support external vendors.

The industry is already experiencing major changes associated with the advent of molecular approaches. Genetics, genomics, proteomics in the future will allow pharmaceutical companies to more accurately identify diseases and create entire packages of health solutions for patients with specific subtypes of diseases, instead of producing "dimensionally" drugs for patients with similar symptoms, but essentially different diseases. Companies that learn how to create "targeted therapeutic solutions" in the future will be able to significantly increase the profits of their shareholders. Information technology will be the key to this transformation.

3 example of information technology implementation in the pharmaceutical industry

At present, in many areas it is quite difficult to do without information technology. Almost all actions are carried out through a computer or through other electronic devices. Even when you visit hospitals, they register you in the database and supplement your medical card, or when you buy a gift for a loved one, you pay with a card, information technologies are also involved in this case, because this article is also in electronic form.

Information technology is also used in the pharmaceutical industry, starting with the purchase of raw materials and ending with the sale of a drug. One of the examples of implemented information technologies is the "Corporate information system "Parus"" which is used in the pharmaceutical plant "Gedeon Richter - Rus" - a subsidiary of the largest manufacturer of medicines in Eastern Europe JSC "Gedeon-Richter" (Budapest, Hungary). The plant is engaged in the production of medicines in solid form. The Parus information system is used in the following divisions of the Gedeon Richter-Rus plant:

- economic management;
- department of quality control;
- production;
- department of capital construction;
- pharmaceutical warehouse;
- accounting;
- Department of information service

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