

ANALYSIS OF IMPACT FACTORS ON THE PROCESS OF IMPLEMENTATION MODERN DIGITAL TECHNOLOGIES IN DOMESTIC PHARMACY

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Introduction. According to international practice, the modern world has entered a new era of digital globalization, which is determined by continuous streams of data that contain information, knowledge, ideas and innovations. According to experts from BCG (The Boston Consulting Group), by 2020, about 25% of the world economy will move to the introduction of digital technologies that will enable the state, business and society to function more effectively. Developed countries, completing industrialization, successfully digitize the economy, accelerating the development of innovative technologies dominated by artificial intelligence, automation and digital platforms. The development of domestic society, the creation of new ones and the modernization of existing technologies causes the need for change the activities of business entities in many sectors.

The pharmaceutical industry is a vivid example how the implementation of digital technologies affects the development of both the industry as a whole individual products. Exactly pharmaceutical industry requires the high level of regulation, the certification and hard terms to ensure the quality of products, its full compliance with high standards of quality, the minimization, and, ideally, complete exclusion of the human factor in production. Therefore, the pharmaceutical industry, according to experts, is and will be one of the generators of digitalisation development in Ukraine in the future and in the world. Thus, at these terms, the analysis of reasons that negatively influence on the process of digitization in pharmaceutical industry as an important factor of creation and effective advancement of new medicinal facilities, acquires the special actuality.

The aim of research is the determination of negative factors of influence on the process of introduction of modern digital technologies in pharmaceutical industry.

Material and methods. We were conducted the expert questioning on the basis of the preliminary worked out questionnaire, with the aim of determination of factors, that negatively influence on the process of introduction of modern digital technologies in pharmaceutical industry. The specialists that have practical experience in the pharmacy not less than 5 years are the leaders of domestic industrial and wholesale pharmaceutical companies, the workers of departments of quality management, the

pharmaceutical logistic, pharm establishments, the establishments of health protection and others, were attracted, as experts.

The scientifically substantiated number of experts who took part in the survey were 214 persons.

The degree of coherence in findings of the experts, that was measured by means of concordance rate ($W = 0,908$), possible to admit as high. The meaningfulness of concordance rate was estimated by means of calculation of criterion of Pearson (χ^2) and comparison of it with a tabular value for the degrees of freedom of $n - 1$. As a calculation value χ^2 considerably exceeds a tabular value 197, 211, that confirms not chance of coherence of findings of the experts.

Results and discussion. The conducted researches led to the conclusion that the introduction of digital technologies in pharmacy will help to: reduce costs, based on preventing possible risks and removing the operations that do not add value to the customers; improving the quality and accuracy of orders; improving the reliability of supply chains; increase the level of carelessness and security of chains; reduce logistics costs and losses; reducing the risks associated with getting to the chains of counterfeit and counterfeit products; increasing the transparency of business processes and, consequently, increasing trust between partners in the chain; raising the level of particulars regarding information that is a trade secret and etc.

The results of the conducted analysis testify that the main reasons the braking of implementation process of modern digital technologies in home pharmaceutical industry it is been:

- the absence of the proper material (computer) base at pharmaceutical companies (pharmacy establishments);
- the absence of lack of trained manpower knowledgeable digital technology and industry specialization;
- significant potentially investible costs relating to the installation such projects;
- the absence in Ukraine of the necessary legal and regulatory framework, standards regulating the use of digital technologies;
- the absence at the staff of experience with digital technologies;
- threat of leveling of cost of digital product and intellectual property on the whole;
- the absence of the focus of software vendors and other economic activities, whose entities create a digital product to the domestic market with high level piracy of intellectual property;
- uncertainty of leaders regarding expectations economic and social impact from the introduction of digital technologies;
- significant potential risks associated with the introduction of digital technologies, etc.

The analysis of scientific literature and the results of personal researches, have enabled to identify the main ways to increase the digitalization of the pharmaceutical industry:

- the harmonization of activity of the pharmaceutical industry with European and world scientific initiatives;
- the active realization of research in relation to regulation of business processes of pharmaceutical production that are based on the use of digital technologies;
- the necessity of identify priorities of digital initiatives and the establishment of their clear co-ordination to strategy of development of subjects of pharmaceutical market;
- the creation of teams within the corporate structure from a number of highly skilled and talented specialists and forming the culture of generating, the development and introduction of digital initiatives;
- the elimination of legislative, institutional, fiscal and other obstacles, that keep down the development of digitalization in the pharmaceutical industry;
- using the effective incentives and the motivation for encouragement of pharmaceutical business to digitize;
- the creation of demand and formation of needs among the subjects of the pharmaceutical market in relation to digitalization, first of all through the introduction by the state of large-scale projects of digital transformations in particular on the base of modern models of state-private partnership;
- the development of digital enterprise in pharmaceutical industry, the creation of corresponding (including analogue) infrastructures for support and development of innovative activity etc.

All these events in an eventual result will assist for improving the quality and the availability of medical care for the Ukrainian population.

Conclusions. Thus, the positive effect from the digitization of the pharmaceutical industry will not have to wait long. The pharmaceutical market players will be able to improve the timing of logistics operations, significantly improve the efficiency of their activities and, in an eventual result, bring down the running expenses, renouncing paper processes and digitizing the components of work. The digitization of the pharmaceutical industry will help to create, a reliable the digital environment, optimize and scale operations, do them consistent and safe. Due to digitization, speed-up to develop the innovations, support the startups, teach all persons interested in to bases of programming, the inculcating of digital technologies in industry, becomes possible. The realization of all above conditions will improve to promote the productivity of functioning of home pharmaceutical industry and will score the additional competitive advantages in the globalized digital world.