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APPLICATION OF AI IN BELARUS HEALTHCARE SYSTEM

**ПРИМЕНЕНИЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА
В ЗДРАВООХРАНЕНИИ БЕЛАРУСИ**

There is no need to explain what artificial intelligence is and why it's so widely discussed nowadays. The only thing that should be highlighted is that artificial intelligence models speedily crunch the huge amount of data and spew out insights with an uncanny human intelligence. According to international studies, the use of artificial intelligence in medicine can increase the gross profit of companies in the healthcare industry. In 2016, the share of the European market of AI was estimated at $ 270 million with an expected annual growth of more than 35%. On behalf of BIS Research, by 2025, the total market for AI in healthcare will reach $ 28 billion with a CAGR of more than 45.1%, and the market for AI for medical imaging and diagnostics will be $ 2.5 billion. Current healthcare system have such problems as the problem of diagnostic quality: about 20-30% of medical research is inaccurate or inaccurately interpreted and the huge amount of data that is generated by all sorts of medical devices and information systems. Automation of routine actions for the collection and analysis of disparate medical data would improve the accuracy of early diagnosis and prediction of disease development, assessment of the effectiveness of treatment.

The object of research is implementation of AI in healthcare. And the aim is established: to show how healthcare system and the government can benefit from it, to establish steps for spreading this technology in Belarus.

According to OECD estimates, 20% of healthcare spend is wasted globally. Using both estimates, the top 15 countries by healthcare expenditure waste an average of between $1,100 and $1,700 per person annually.

Role of AI in Healthcare:
1. Virtual Health Assistant
2. Diagnosis
3. Healthcare BOTs

Challenges for AI in Healthcare:
– Adoption
– Training Doctors/Patients
– Regulations

Belarus has already examples of using AI in healthcare. One of them is Medtech-start-up Healthy Networks, which creates a product for the diagnosis of diseases of the respiratory tract based on neural networks. *Lung Passport* - is a mobile application with an electronic stethoscope. With the help of machine analysis and digital signal processing, lung sounds can be differentiated more accurately than the doctor does. Because of the limitations of human hearing and a tense work environment (noise, a large number of patients, little time), a physician can tolerate an error, but a neural network does not.

Steps that can be done to widen usage of AI in Belarus:

1. Start developing human resources in this direction. For this, it is sufficient to develop and introduce into the educational process of specialized institutions special courses on the theory and practice of processing large volumes of data and machine learning.

2. Change the legislation in order to provide legal access to anonymized medical information for research and machine learning.

3. Reduce the cost and time of the process of commercializing medical innovations.

Given the share of the non-state sector in the country's economy, relying on the development of artificial intelligence in medicine only at the expense of private companies is at least unpromising. A full-fledged state scientific and technical program for the creation and planned introduction of artificial intelligence technologies in all sectors of the economy should be developed and implemented.

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THE MODERN HUMANITARIAN PROBLEMS OF A GLOBAL INFORMATION SOCIETY DEVELOPMENT

СОВРЕМЕННЫЕ ГУМАНИТАРНЫЕ ПРОБЛЕМЫ РАЗВИТИЯ ИНФОРМАЦИОННОГО ОБЩЕСТВА

It is obvious that the role of humans today is objectively increasing since a man is the primary resource for the information development of the society. At the same time, a man is also a risk factor in the Information Society, the object and the source of new information and communication challenges and threats for further development of civilization. The relevance of the following research is the influence