

INFORMATION SYSTEMS IN THE DIGITAL HEALTH ECOSYSTEM

Orifjonov D.R.

Scientific supervisor: Saifullaeva D.I

Tashkent Medical Academy, Tashkent, Uzbekistan

Abstract: The main motive of digital transformation is determined by the desire of "customers of the new digital generation" for timeliness, accessibility, quality and personalization. The basic principle of the digital paradigm is the principle of "everything as a service", and a service oriented to data and the sharing of information resources (including public ones), taking into account the requirements of interoperability and security.

Keywords: *ecosystem, platform, application, services, medical organization, medical organization efficiency, medical information system, IT platform, medical care ecosystem, electronic medical record, electronic medical archive.*

Main part:

The concept of digital medical ecosystem has emerged relatively. Firstly, the intensive development of the digital economy is actively changing the requirements for personnel training, in particular, bringing to the forefront the problem of developing digital competencies and flexible skills, which has led to the objective need to transform the traditional healthcare system. Using the latest technologies, digitalization is reshaping the competitive landscape and blurring the boundaries established among the players in a particular sector of medicine. The transition to the digital paradigm today is dictated by digital leaders - Google, Apple, Facebook and Amazon - and, accordingly, its significance is determined by the level of expectations of "customers of the new digital generation", who are accustomed not only to the constant availability of services, but also to the high speed of their delivery (receipt). Therefore, the efforts of large IT companies, hardware and software vendors, and innovative startups are primarily aimed at changing the form in which existing products and services are offered to customers. Based on the fact that customers are quickly becoming accustomed to the level of digital service, solutions are being proposed that better meet their needs, increase accessibility, ensure usability and personalize services, taking into account individual customer characteristics and interests.

One of the main recognized tools for the restructuring of health care today is information technology, which provides means of communication, data exchange and analysis. The use of information technology in all areas of health care is referred to as e-health or digital health. To operate effectively in the era of digital health in the face of constantly rising health care costs and chronic underfunding, it is no longer sufficient to create a system in which health care organizations exchange data with each other on the basis of a common infrastructure or digital communication methods.

Increasing competitiveness in the healthcare market by creating new value and offering new services that meet the needs of both patients and businesses is becoming an increasingly important condition for the success of healthcare organizations. The transition to the post-industrial phase of economic development and the building of an information society within the framework of the digitalization of medicine are primarily associated with the provision of services through digital ecosystems and platforms. Therefore, assessing the prospects for the application of breakthrough technologies, including artificial intelligence (AI), is even more relevant nowadays. The application of artificial intelligence (AI) in medicine today allows simple tasks to be performed perfectly. For example, an X-ray can detect the presence of a foreign body or pathology, as well as the presence of cancer cells in cytologic material. When analyzing various medical data with the use of AI already shows excellent results - the accuracy of pathology detection by ultrasound and MRI is more than 90%. An information system that improves patient satisfaction and hospital productivity by analyzing and managing hospital workflows from patient registration, treatment, examination to payment.

Hospital information system implementation- the goal is to provide effective, efficient and safe medical care to the patient.

Hospitals around the world are accelerating the implementation of a hospital information system

- Digital data storage and retrieval
- Rapid transfer of patient information
- Improve medication safety and reduce the risk of medication errors
- Easy retrieval of patient information
- Effective hospital management

Hospitals in Uzbekistan begin to implement a hospital information system

The government (MoH) is trying to implement a hospital information system in all public hospitals and clinics.

Similar to processes in the IT industry, ecosystem processes can be observed in the health sector. According to some forecasts, which are still valid, in the near future most of all health services will be provided by medical associations. Such associations will serve the bulk of patients and will gradually erase the existing boundaries between inpatient and outpatient medical care. Thus, one of the main competitive advantages of an individual MO is the ability to interact and develop by accompanying the patient during treatment in different MOs, i.e. to function within an ecosystem. The concept of a digital ecosystem of a network of medical organizations extends the concept of an IT ecosystem, without which its functioning is impossible, to the social ecosystem.

The proposed concept of a digital ecosystem of medical care allows for flexible creation and distribution of new value, proactively offering new services that meet the needs of both patients and businesses by combining products and services of the ecosystem from ready-made components. In order to successfully create and fully develop a medical care ecosystem, it is necessary to select the most effective scenarios or business models of functioning. The main scenarios for implementing the concept of a digital health care ecosystem are numerous: from a network of general practitioners to a regional or departmental medical information system (RMIS or VMIS), from a medical unit of a large corporation or a network of commercial clinics to patient portals. But the concept can be most fully realized by implementing a business model of a "virtual hospital", which is created on the basis of many existing medical care providers with a common client base of patients, an integrated electronic medical archive and a common register of medical service providers

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