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PRIVACY AS A KEY FACTOR OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) DEVELOPMENT IN HEALTH CARE

Abstract:

The transfer of a large part of activities to the cyberspace has made the society heavily depended on ICT. Internet of Things has been created due to the appearance of smart devices. IoT generates a new dimension of the network. Its use has ceased to be the domain of man. Communication only between devices has become possible, posing new challenges, directly related to security threats and a lot of new opportunities for unauthorised data. While there is a common awareness of the potential risks in using computers or networks, the use of intelligent things is wrongly seen as making life easier and paradoxically more secure.

It is extremely important to notice seemingly unimportant behaviour, but likely to cause harm. In a world with "smart" things, there are threats such as permanent surveillance, incessant and uncontrolled data leaks or identity theft. The challenge is to set up and formulate norms and enabling legislative processes to keep pace with the technology advancement.

The use of ICT, especially in science and industry, changes everyday life already today. Society aging and increase in health care expenditure makes it imperative to expand the use of ICT in health care, where a revolution is expected with the use of intelligent diagnostic support systems, current health state monitoring and specialised technologies enabling remote medical procedures adaptation. But there are dangers associated with IoT use in health care requiring clearly defined criteria. Patients must be able to expect privacy and medical data safety.

Even seemingly indispensable necessity to ensure the safety of medical data is not obvious.. Utilising ICT in the health sector will ensure change in approach towards patients and increased productivity. The need for privacy should be considered at the stage of technology design and implementation. Ensuring medical data security is paramount. Otherwise, social resistance and costs resulting from i.e. leakage of medical data and use of such data in an unlawful or even threatening manner will be very high.

Keywords:

health care, Internet of Things, privacy, security threats

JEL Classification: I18, K30, K32