Modeling the Information Transparency of Health Service Privacy Policies

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Abstract. In the present-day age of information abundance, in which the rights and freedoms in the digital environment are strengthened, information transparency is becoming an integral part of them. The rights of individuals to their own choice are more consequential in the field of privacy protection and the process of digital transformation in organizations is increasingly focused on the protection of collected and processed personal data. The basic (ex-ante) tool of transparency is the publication of privacy policies to inform the individuals with the procedures related to the collection, sharing, use and storage of their personal data, making them active shareholders in decision making process. The aim of this paper is to identify the factors influencing the information asymmetry of privacy policies in the field of health services and to provide a conceptual model for evaluating their information transparency.

Keywords. Information transparency, privacy policies, health service

1. Introduction

As the COVID-19 pandemy has disrupted the entire society safe, secure and standardized health information exchange has become imperative [1]. In such environments, it is difficult for users to identify risks to their personal data protection, especially since medical data, is considered to be sensitive data. The concept of information transparency is defined by drafting and publishing of privacy policy documents as mechanisms that contain all the information that users need to make informed decisions regarding their personal data. So, effective mechanisms for achieving transparency should aim to reduce information asymmetry between users and healthcare providers.

2. Methods

The ineffectiveness of transparency mechanisms can lead to infobesity or infoxication [2], a state in which more information is provided than is needed, leading to cognitive saturation or, conversely, to information starvation as a state in which less data is provided than needed. A state of overload or starvation arises when the depth of the information provided does not meet the requirements set in relation to the information, processes or policies provided.

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Depending on the content of the requirement and its category, it is necessary to set appropriate indicators that measure the depth of information for its fulfillment in relation to the ability of users to make decisions, while considering the services and organizational hierarchies of data processors, health service institutions. Audit of transparency mechanisms efficiency can be performed by the metrics proposed in [3] and in relation to taxonomic transparency requirements set by [4].

3. Results

To model efficient privacy policy mechanisms certain requirements on both dimensions of transparency should be considered: visibility, ie the degree of completeness of information and the possibility of finding them, and inferability, ie the degree to which information can be used to make the right decisions [5]. Dimension of visibility, focused on the content determinant of transparency, depends on indicators for informativeness, accessibility and currentness, while the degree of intervenability is characterized by qualitative characteristics of the mechanism of transparency itself, such as layering of the content, its meaningfulness and readability as indicators. By the ratio of the degrees of these two dimensions, it is possible to determine the level of information (a)symmetry in privacy policy documents.

4. Discussion

The proposed model for privacy policy information transparency evaluation sets the degree of information asymmetry as a reference value, which, in relation to the state of absolute symmetry, can be used to measure the values of elements on both dimensions of transparency.

5. Conclusions

By appointing information symmetry as a reference metric, the methodology for a standardized presentation of the information transparency factors within privacy policies can be developed and applied as a basis for risk assessment.

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