

OPINION

for Kadir Ider's dissertation on the topic

"GDPR Complexity Reduction and Operational Implementation: Conceptualizing a User-Centered Online Privacy Control System and Assessing Its Effects on Organizational Trustworthiness"

for the acquisition of the educational and scientific degree "Doctor"

in professional direction 5.3 "Communication and computer technology"

by Prof. Sotir Sotirov from the University "Prof. Dr. Asen Zlatarov", Burgas

Based on the Order of the Rector of TU Varna, I was appointed as a member of the Scientific Jury to prepare an opinion on Kadir Ider's dissertation on the topic "Reducing the complexity and operational implementation of GDPR: Conceptualization of a user-oriented online privacy control system and assessing its effects on organizational reliability'

Description

The dissertation has a total volume of 146 pages and is composed of an introduction, six chapters, a conclusion, contributions to the dissertation, a list of publications and a bibliography containing as far as I could count 67 sources.

Chapter 1 is an introduction.

Chapter 2 provides an analytical study and review of global and regional solutions to the problem. Here is an analytical study with a literature review, relevance of the topic - societal impact of privacy - is considered. A state of research is explored and a comparative analysis of models is made. The formulation of the purpose of the doctoral studies is given in this chapter. Here, the PhD student presents the problem - vague regulations and lack of practical guidance, considers technology as a factor and obstacle, as well as the dilemma of complying with data protection requirements.

The tasks that must be solved to achieve this goal are also placed in this chapter. The whole chapter is concluded.

In Chapter 3, a theoretical formulation of the solution and the tasks to achieve the goal are made. Organizational models are discussed, with most of the content devoted to research methodology and tools, preliminary research results, and user behavior toward personal data and technological benefits.

The chapter gives the legal models, with their terms and definitions, the definitions of the GDPR, as well as its main points such as territorial applicability and boundaries, natural person and personal data, definition of processing, possibilities and limitation. The principles of data processing, the types of administrators, processors and their obligations, international data transfers, etc. are also presented here. The chapter ends with a conclusion.

The fourth chapter is dedicated to the conditions and environment for implementing the solution. This includes using a suite of tools to implement solutions, evaluating data based on age group, occupation and device usage, and analyzing psychological control.

Experimental verification is in the fifth chapter. Here, the choice of site for conducting the experiment, legal control and data, processes and IT systems, etc. were made.

Chapter 6 presents the contributions to the dissertation. A proposal is a research contribution, scientific publications, and a recommendation for further research

Chapter 7 gives the literature and chapter 8 the appendices.

The structuring of the dissertation work is at a good level. There are theoretical descriptions that are very well argued, supported by literary sources, and reflect different points of view in the process.

In the list of publications on the dissertation work, six articles are included. The first of these was published in an IEEE conference and appears accordingly in the contents of SCOPUS. The remaining reports are in various international journals. From the reference made, it can be seen that the doctorate has 1 publication in Scopus.

The PhD student formulated the following contributions:

The main research contribution of the PhD thesis was the proposal of a comprehensive framework for ensuring GDPR compliance, which led to the following tangible results:

- A framework is proposed for considering GDPR provisions in the context of connected medical technologies, which highlights the need for a user-oriented privacy control system.
- Essential components necessary for the lawful and responsible processing of personal data in this specific area have been identified by applying the proposed framework.
- Validate the proposed framework by designing and implementing a questionnaire to collect and analyze data that can be used for future research in this area.
- An actionable user-centric privacy control system roadmap is developed through a systematic assessment of the legal, technical, and psychological control spectrum.

- Privacy by design guidelines have been implemented at both the work level and information system level to enable individuals to exercise their legal rights effectively and organizations to comply with GDPR requirements.

- The mutual effects of control and trustworthiness were analyzed, revealing that a simple user-friendly interface was critical to perceived control and organizational trustworthiness.

- A foundation has been laid for organizations to increase their reliability and achieve GDPR compliance by highlighting the need for a user-centric privacy control system in connected medical technology. I welcome the contributions of the Ph.D.

In conclusion, I can say that the topic and the dissertation work are relevant, and that original results have been obtained. The dissertation meets the requirements of ZRAS and the Rules of TU-Varna, I give my positive opinion and recommend to the respected members of the Scientific Jury to vote for awarding Kadir Ider the educational and scientific degree "Doctor" in professional direction 5.13 "General Engineering", scientific specialization "Organization and management of production (industry)".

10.12.2023

Prepared the opinion:

(Prof. Dr. Sotir Sotirov)