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RISK MODEL OF APPLICATION OF LIFTING METHODS

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The article discusses the main provisions (methods, risk models, calculation algorithms, etc.) of the issue of organizing the protection of personal data (PD), based on the application of anonymization procedure. The authors reveal the relevance of the studied problem based on the tendency of the general growth of informatization and the further development of the Big Data technology. This circumstance leads to the need to use the so-called risk approach based on calculating the risk of PD as a probabilistic assessment of the amount of possible damage that the owner of the data resource may incur as a result of a successfully carried out information attack. For this purpose, the article describes an algorithm for calculating the risk of PD and proposes a risk model of the depersonalization procedure, which considers confidentiality problems arising both as a result of unauthorized access and as a consequence of planned data processing. To describe the risk model of the anonymization procedure, the types of attacks on the confidentiality of personal data, anonymization metrics and equivalence classes are analyzed, as well as the attacker's profiles and data distribution scenarios. Thus, the choice of a risk model for the depersonalization procedure was justified, and calculations for the generated synthetic set of PDs were presented. As a conclusion, it should be noted that the model of anonymization risk assessment proposed and tested on synthetic data makes it possible to abandon the concept of guaranteed anonymized data, introducing certain boundaries for working with risks and building a continuous process for assessing PD threats, taking into account the constantly growing volume of stored and processed information.

Information protection, personal data, depersonalization, information systems, model, risk of depersonalization procedure.

Summary

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