

MODELING OF INFORMATION INFLUENCE ON SOCIO-CULTURAL DEVELOPMENT OF SOCIETY

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Abstract

The theoretical and methodological research presented in the present paper is based on the development of an analytical model of the information impact on the socio-cultural development of society in the context of dynamic acceleration of globalization processes. The purpose of the research is to improve the matrix method of modeling the information influence in the conditions of ensuring information security, which is characterized by taking into account the influencing characteristics of sources and channels of obtaining information and allows to reveal the influencing degree of information in the context of the socio-cultural development. This method allows to synthesize the function of analyzing the level of protection of the information security system, and it can be used to provide recommendations for effective management decisions to prevent the negative informational impact on the socio-cultural development.

The research was conducted on the materials of the State Statistics Service of Ukraine and data of the Ministry of Social Policy of Ukraine. The methodical basis of the research were general and special methods, namely: system analysis - in order to comprehensively characterize information security in the socio-cultural context; synthesis and comparison - in diagnosing the potential of the potential opportunities for ensuring information security, matrix modeling method - in order to developing an analytical model of information influence on the socio-cultural development of society.

As a result of the research, there have been obtained the matrices of the characteristics of influence objects, the basis of which are the indices of influence objects (objects of the social and cultural environment) and coefficients reflecting their resistance to influence depending on the degree of influence intensity. The proposed dependencies make it possible to build laws for the distribution of the loss's probability as a result of the information influence in the conditions of the information society's intensive development.

Based on the developed analytical-matrix model of the information influence analysis on the socio-cultural development new ways to improve existing mathematical models for their practical application in ensuring the sustainability of information security in the sociocultural context were identified. By means of an analytical-matrix model of the information influence analysis on the socio-cultural development, an algorithm has been developed

to identify the level of protection of socio-cultural development sustainability in order to effectively manage dynamic processes of information influence, depending on its duration and intensity.

Key words: *Information security, Information influence, Dynamic processes management, Dynamics of influence intensity, Sustainability of socio-cultural development.*