THE USE OF PROBABILISTIC RELATIONAL MODELS OF COMPLEX "CRITICAL DOCUMENTS - INFORMATION SYSTEM - THE USER - THE ATTACKER" FOR THE ANALYSIS OF SECURITY OF INFORMATION SYSTEMS USERS FROM SOCIAL ENGINEERING ATTACKS

Azarov Arthur Alexandrovich
Senior researcher at Laboratory for Theoretical and Interdisciplinary Computer Science, St. Petersburg Institute for Informatics and Automation RAS;
Head of the Laboratory of mathematical modeling of social processes,
Institute for High-Hume Technologies in Social Computing, Sholokhov University
Russia, 199178, St. Petersburg, 14-th line V.O., 39, SPIIRAS.
E-mail: artur-azarov@yandex.ru

Abramov Maxim Viktorovich
Junior researcher at Laboratory for Theoretical and Interdisciplinary Computer Science, St. Petersburg Institute for Informatics and Automation RAS
Russia, 199178, St. Petersburg, 14-th line V.O., 39, SPIIRAS.
E-mail: mva16@list.ru

Tulupyeva Tatiana Valentinovna
Senior researcher at Laboratory for Theoretical and Interdisciplinary Computer Science, St. Petersburg Institute for Informatics and Automation RAS;
Associate professor at Computer Science department,
St. Petersburg State University
Russia, 199178, St. Petersburg, 14-th line V.O., 39, SPIIRAS.
E-mail: tvt100a@mail.ru

Filchenkov Andrey Alexandrovich
Researcher at International Scientific Laboratory "Computer Technologies",
ITMO University
Russia, 197101, St. Petersburg, 49 Kronverksky Pr., ITMO University.
E-mail: aaafil@mail.ru

The article describes a model user profiles and vulnerability, the attacker model and sotsiinzhenernyh attack model of information systems and software and hardware devices. Trends in the development of modern business often require confidentiality of corporate information leakage which may result in significant financial losses. Leakage of confidential information may be associated with problems of insecurity and the software and hardware components of the information system of the organization and with the users of the system. Leaks of confidential information from the users of information systems can be carried out for several reasons: because of social engineering attacks influences attacker when a user misled and the attacker receives the required confidential information, as well as due to insider attacks the users of information systems. Insider attack users of information systems can be implemented with the involvement of social engineering attacks influences, but in this

case the source of social engineering attacks impact will be located within the organization.

Bibliographic citation

Azarov A.A., Abramov M.V., Tulupyeva T.V., Filchenkov A.A. The use of probabilistic relational models of complex "critical documents - information system - the user - the attacker" for the analysis of security of information systems users from social engineering attacks. *Nechetkie Sistemy i Myagkie Vychisleniya* [Fuzzy Systems and Soft Computing], 2015, vol. 10, no. 2, pp. 209–221. (in Russian)