

Source of financing	Grant funding of young scientists under the "Zhas Galym" project for 2023-2025 (Ministry of Science and Higher Education of the Republic of Kazakhstan)
Priority directions	Information, communication and space technologies
Specialized scientific areas	Artificial intelligence and information technology. Intelligent control and decision-making systems (including real-time)
IRN of the project:	AP19174390
Name of the project:	Development of the intellectual system for assessing information security risks.
Project Manager	Alibek Barlybayev, PhD
Implementation deadlines	2023-2025 yy
Relevance (briefly)	Development of new digital technologies and their use, on one hand, have opened up new opportunities for improving efficiency of managing technological and business processes. On other hand, it has led to significant increase in security threats, making businesses and organizations more vulnerable to cybercriminals. Soaring growth in the number of incidents of various types in recent years indicates the insufficiency of traditional methods of ensuring information security (hereinafter IS). At present, consideration of issue of IS from point of view of risk management makes it possible to take cost-effective and effective enterprise security measures. Main benefits of cybersecurity risk assessment is that it will help identify internal and external risks that are relevant to system. This is very important as it provides visibility into the individual components of the ICT security system and identifies which areas are weak and in need of improvement. This information will ultimately guide future security investments and provide recommendations on how to improve system.
Purpose	Project goal is to create new flexible models and algorithms for assessing IS risks to improve the efficiency of IS management in an organization. Based on them, an intelligent system will be developed that will allow determining a sufficient minimum investment and practical recommendations to reduce likelihood of IS incidents.
Expected Result	1) Research of IS risks using machine learning methods. 2) Development of flexible model of the most important concepts and relationships between them in subject area of IS risk assessment. 3) Development of intelligent IS risk assessment system.
Target consumers of the results obtained	government organizations, subordinate organizations, private organizations of medium and large businesses that actively use information systems in organizing the production process