PROJECT INFORMATION

PROJECT OBJECTIVE

The objective of the project is to conduct an interdisciplinary (comprehensive) study aimed at developing and adapting, taking into account advanced international experience, models of effective interaction between universities, government, and business for the implementation of technology transfer. This transfer is intended to support the development of Kazakhstan's digital knowledge economy and enhance the country's competitiveness in the international arena.

PROJECT OBJECTIVES:

1) To conduct a study of successful models of interaction between universities, government, and business in countries with advanced digital economies, such as the United States and the European Union. To identify the key factors that contribute to the effective commercialization of scientific research and its transfer to the real sector of the economy.

2) To analyze existing barriers to technology transfer in Kazakhstan, including legal, organizational, economic, and institutional aspects. To assess the possibilities for adapting international models in light of national characteristics and to determine priority areas for their implementation.

3) To develop and test pilot models of interaction between universities, business, and government aimed at enhancing technology transfer within Kazakhstan's digital economy. To identify mechanisms for stimulating cooperation and opportunities for scaling the proposed models.

4) To prepare methodological recommendations for government authorities, universities, and businesses, including measures of state support, organizational and legal mechanisms, as well as instruments to stimulate the commercialization of scientific research and the development of the digital economy.

5) To conduct economic and mathematical modeling to assess the long-term effects of the proposed models, including increased innovation activity, a higher number of commercialized technologies, human capital development, and the enhancement of Kazakhstan's international competitiveness.

6) To publish at least three articles in peer-reviewed journals indexed in Web of Science and Scopus, as well as at least two articles in journals recommended by the Committee for Quality Assurance in Science and Higher Education (CQASHE). One of the publications will be interdisciplinary in nature, with a practical focus on the integration of science and business within the digital economy.

7) To collect and systematize successful cases of interaction between universities, business, and government in Kazakhstan and abroad, creating a database of best practices for dissemination among participants of the innovation ecosystem.

EXPECTED RESULTS:

– Three articles or review papers in peer-reviewed scientific journals within the project's research field, indexed in the Science Citation Index Expanded and ranked in the 1st (first), 2nd (second), and/or 3rd (third) quartile by impact factor in the Web of Science database and/or having a CiteScore percentile of at least 60 (sixty) in the Scopus database. The articles will reflect the key findings of the study, including the

developed models of interaction between universities, government, and business, as well as the proposed mechanisms of technology transfer.

– Five articles or review papers in peer-reviewed international or national journals recommended by the Committee for Quality Assurance in Science and Higher Education (CQASHE). One of the articles will be prepared under the multidisciplinary category, covering the practical interdisciplinary application of interaction mechanisms within the digital economy.

– Development and pilot testing of models of interaction between universities, government, and business adapted to the conditions of Kazakhstan and aimed at increasing the efficiency of technology transfer into the digital economy.

– Preparation of an analytical report summarizing international experience, analyzing barriers and opportunities in Kazakhstan, and providing recommendations for government authorities, universities, and businesses on optimizing interaction and commercialization processes, including proposals for state support incentive measures.

– Creation of a database of successful cases of science–business interaction, covering examples from Kazakhstan and foreign countries, with the possibility of their use in educational and applied activities.

– Forecasting the long-term effects of implementing the proposed models to enhance Kazakhstan's competitiveness in the global digital knowledge economy.