

Strategic Positioning of Al-Farabi Kazakh National University in Producing the Digital Economy Information System Professional Students

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Abstract: The rapidly growing processes of digitalization of world societies imply the need to prepare universities that can create highly skilled Information Systems (IS) professionals with both technical expertise and strong analytical skills as well as ethical decision-making abilities. This paper considers the academic, technological, and institutional processes that enable the Al-Farabi Kazakh National University (KazNU) to develop future IS experts that are engaged in digitalization of the country, building of intelligent systems, cybersecurity, and policy formulation presented by data. Basing the study on empirical findings, institutional analysis, and other academic materials, it is manifested as the research framework, interdisciplinary-oriented curriculum, innovation ecosystems, and international cooperation of Al-Farabi Kazakh National University.

Keywords: Information Systems (IS), Industry 4.0, Academic Mobility and Intelligent Systems.

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I. INTRODUCTION

In the modern world economy, the information systems form the backbone of the governance, business activities, scientific research and social interaction. Since countries aim to be digitally competitive, universities should take a proactive responsibility to equip experts to deal with complex information infrastructure, optimize and innovate these information systems. The combination of modern pedagogical techniques, state-of-the-art computing technologies, and research-based practices is a feature of Al-Farabi Kazakh National University (KazNU) that trains a new generation of IS professionals.

II. INFORMATION SYSTEMS EDUCATION ACADEMIC EXCELLENCE

The IS program created by Al-Farabi Kazakh National University is characterized by the harmonious combination of the theoretical and practical aspects. The technology to be included in the curriculum is database technologies, cybersecurity, software engineering, enterprise architecture and data analytics. Knowledge of the faculty improves the research participation and the competence of the approaches.

III. CONCURRENT ENGINEERING RESEARCH ENVIRONMENT AND TECHNOLOGY

Al-Farabi Kazakh National University promotes research activities by means of high-end labs, machine-learning departments, big data centers, as well as cybersecurity departments. The national digitalization

projects that students are involved with include Smart City development, e-government and the data systems of the state.

IV. INTERCULTURAL INTERCONNECTION AND PROBLEM COLLABORATION

The Information System is interdisciplinary in nature. At Al-Farabi Kazakh National University, the cooperation between computer science, economics, sociology, ethics, and management spheres are supported. This prepares the learners to develop socio technological solutions that deal with human, organizational and technological aspects.

V. INTERNATIONALIZATION AND COMPETENCE GLOBAL DEVELOPMENT

Al-Farabi Kazakh National University has over 500 partners among the universities of the world, creating an academic mobility, research cooperation, and digital project development. Such collaborations promote the technological and cultural literacy of the students.

VI. THE HANDS-ON TRAINING AND INDUSTRY SUMMER INTERNSHIPS

IS students will take up bank, telecommunications, and IT Novice positions as well as intern in government technology departments. Such experiences reinforce workability and practical ability.

VII. ETHICAL FOUNDATIONS AND THE HUMANISTIC LEGACY OF AL -FARABI

The educational philosophy at Al-Farabi Kazakh National University is based on the model of the Virtuous Society by Al-Farabi with the focus on the promotion of ethical innovation, responsible knowledge creation, and the application of technologies to the benefit of society.

VIII. FOURTH INDUSTRIAL REVOLUTION (INDUSTRY 4.0) CONTRIBUTION

Al-Farabi Kazakh National University assists the students in being ready to work with Internet of Things, artificial intelligence, cybersecurity, blockchain, automation, and data-oriented systems. The strategic orientation of the university corresponds to the digital economy agenda created by Kazakhstan.

IX. CONCLUSION

The Al-Farabi Kazakh National University is home to a strategic incubator of Information Systems talents. The rigorousness of its curriculum and sound research support, interdisciplinary program, and ethical disposition data the graduates to become innovators and leaders that can drive the digital transformation on the national and international sectors.

This article is developed within the framework of the Sustainable Development Goals, with a focus on Goal 4: Quality Education.

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