ҚАЗАҚСТАН РЕСПУБЛИКАСЫ ҒЫЛЫМ ЖӘНЕ ЖОҒАРЫ БІЛІМ МИНИСТРЛІГІ
Л.Н. ГУМИЛЕВ АТЫНДАҒЫ «ЕУРАЗИЯ ҰЛТТЫҚ УНИВЕРСИТЕТІ» КеАҚ
НАНКАЙ УНИВЕРСИТЕТІ

МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ
НАО «ЕВРАЗИЙСКИЙ НАЦИОНАЛЬНЫЙ УНИВЕРСИТЕТ ИМ. Л.Н.ГУМИЛЕВА»
НАНЬКАЙСКИЙ УНИВЕРСИТЕТ

MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE REPUBLIC OF
KAZAKHSTAN NJSC L.N. GUMILYOV EURASIAN NATIONAL UNIVERSITY
NANKAI UNIVERSITY

# «ҚАЗАҚСТАН - ҚЫТАЙ: ЦИФРЛЫҚ ЭКОНОМИКА ЖӘНЕ «БІР БЕЛДЕУ, БІР ЖОЛ» – 2026»

атты бірінші Халықаралық ғылыми-тәжірибелік конференция
материалдарының жинағы
23 мамыр 2026 ж.

Сборник материалов первой международной научно-практической

# «КАЗАХСТАН - КИТАЙ: ЦИФРОВАЯ ЭКОНОМИКА И «ОДИН ПОЯС, ОДИН ПУТЬ» – 2026»

23 мая 2026 г.

Collection of materials
of the first international scientific and practical conference

# "KAZAKHSTAN-CHINA: DIGITAL ECONOMY AND "ONE BELT, ONE ROAD "- 2026"

**May 23, 2026**

Астана, Қазақстан
Астана, Казахстан
Astana, Kazakhstan

**MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE REPUBLIC OF KAZAKHSTAN**

**L.N. GUMILYOV EURASIAN NATIONAL UNIVERSITY**

**NANKAI UNIVERSITY**

# COLLECTION OF MATERIALS OF THE FIRST INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE "KAZAKHSTAN-CHINA: DIGITAL ECONOMY AND "ONE BELT, ONE ROAD "- 2026"

**May 23, 2026, Astana, Kazakhstan**

**ASTANA, 2026**

**УДК 339.9(574:510)**
**ББК 65.5(5Қаз/5Кит)**
**С71**

**Reviewer:**
Galiyeva A.H. – Doctor of Economics, Professor of the Department of Economics at Esil University

B.S. Tolysbayev – Doctor of Economics, Professor, L.N. Gumilyov Eurasian National University

**Editor-in-Chef:** Issayeva B.K. – PhD, associate professor.
**Editorial board:** Azatbek T. A. – d.e.s., professor, Khoich A. – PhD, associate professor, Karipova A.T. – c.e.s, associate professor, Tlessova Elvira – c.e.s., associate professor, Zhanabayeva Zh.K. – c.e.s., associate professor, Berzhanova A.M. – c.e.s., associate professor, Azylkanova, S.A. – c.e.s., associate professor, Seitkhozhina J.A. . – c.e.s., associate professor, Tolepov A.E. – PhD, acting associate professor, Kodasheva G. S. – PhD, acting associate professor, Akylbai M.S. – secretary, c.e.s., senior lecturer

Collection of materials of the International Scientific and Practical Conference "Kazakhstan-China: Digital Economy and "One Belt, One Road "- 2026" May 23, 2026, Astana, Kazakhstan. – Astana, 2026. – 780 pages.

**ISBN 978-601-385-242-3**

The collection of materials of the international scientific and practical conference "Kazakhstan - China: Digital Economy and" One Belt, One Road" – 2026" presents the results of the author's research conducted by the participants on topical and problematic issues. The publication is intended for students, undergraduates, doctoral students, as well as a wide range of readers dealing with topical issues of modern science.

**УДК 339.9(574:510)**
**ББК 65.5(5Қаз/5Кит)**
**С71**

**ISBN 978-601-385-242-3** © L.N. Gumilyov Eurasian National University, 2026

**UDC (334.021.1)**

# DIGITAL TRANSFORMATION OF ECONOMIC SECTORS: TRENDS, TOOLS AND IMPLEMENTATION MECHANISMS

***Zhang Xiantu***
Master student, L.N. Gumilyov Eurasian National University,
Astana, Kazakhstan
Email: 1023381788@qq.com

**Annotation.** Digital transformation has become the core driving force of global economic development, reshaping production methods, business models and competitive landscapes across sectors. This paper analyzes trends, tools and mechanisms of digital transformation, focusing on China-Kazakhstan cooperation under the Belt and Road Initiative. It argues that transformation requires coordinated policy, technology and organizational change to drive sustainable growth.

**Key words:** Digital Transformation; Economic Sectors; Digital Technology; Implementation Mechanism.

Digitalization is accelerating economic restructuring worldwide. Kazakhstan and China prioritize digital transformation under the Belt and Road Initiative to boost high-quality development. This study examines key trends, enabling tools and effective mechanisms to support policy and enterprise action.

The main trends of digital transformation:

- Full-process digital penetration: End-to-end integration of R&D, production and services, as seen in manufacturing digital twins.
- Data-driven decision-making: Big data analytics enables precise forecasting and personalized services in finance and retail.
- Intelligent upgrading: AI/ML optimizes industrial processes, moving sectors from automation to autonomy.
- Cross-sector synergy: Industrial digitalization and digital industries co-evolve to build new ecosystems [1, 2].

Key technical tools:

– Big Data & Cloud Computing: Scalable storage/analysis lowers barriers for SMEs via cloud-based services.

– AI & Machine Learning: Optimizes production quality, risk control and customer interaction.

– Blockchain: Enhances cross-border trade trust and transparency between China and Kazakhstan.

– IoT: Connects devices in agriculture/energy for real-time monitoring and efficiency gains.

Implementation mechanisms:

1. Policy and institutional support: Governments should offer subsidies, tax incentives and legal frameworks for data security.

2. Enterprise strategy and agility: Align transformation goals with organizational change to break silos.

3. Ecosystem collaboration: Partner with universities, tech firms and supply chain stakeholders.

4. Talent development: Upskill workforces and adjust education curricula for digital competencies [3, 4].

Digital transformation offers significant opportunities for economic growth but requires coordinated action across policy, enterprise and education sectors. China-Kazakhstan cooperation under the Belt and Road Initiative can accelerate progress through shared best practices and technology transfer. Future research should focus on measuring transformation impact and scaling inclusive solutions.

**References:**

1. Cyberspace Administration of China. Overall Layout Plan for the Construction of Digital China [EB/OL]. http://www.cac.gov.cn, 2023.

2. Ministry of Digital Development, Kazakhstan. Kazakhstan Digital Development Strategy 2025 [R]. Nur-Sultan, 2021.

3. McKinsey Global Institute. Digital America: A Tale of the Haves and Have-Mores [R]. 2015.

4. Huang Q, Yu Y, Zhang S. Internet Development and Manufacturing Productivity Improvement [J]. China Industrial Economics, 2019(8): 5-23.

**UDC (314)**

## THE IMPACT OF DEMOGRAPHIC STRUCTURE CHANGE ON RESIDENT INCOME IN CHINA

***Zhang Yangge***
Master student, L.N. Gumilyov Eurasian National university,
Astana, Republic of Kazakhstan
E-mail: zhangyangge1018@163.com

**Annotation.** Demographic structure change provides an important perspective for understanding resident income growth and labour market adjustment. This paper examines the relationship between changes in the working-age population and resident income in China using annual data from 2000 to 2024. A multiple linear regression model is employed to assess the impact of demographic variables on per capita disposable income, controlling for economic structure, urbanisation and