Yeskerova Z.A.*
PhD student
Karaganda National Research University named
after academician Ye.A. Buketov
Karaganda, Kazakhstan
e-mail: zamirra_e@mail.ru
ORCID: 0000-0001-6870-6390

Akybayeva G.S.
c.e.s
Astana IT University
Astana, Kazakhstan
e-mail: akubaeva_g@mail.ru
ORCID:0000-0001-8201-3638

Mambetova S.Sh.
c.e.s
Karaganda National Research University named
after academician Ye.A. Buketov
Karaganda, Kazakhstan
e-mail: sagynysh.2012@mail.ru
ORCID:0000-0009 -0877-1137

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE DEVELOPMENT OF WOMEN'S LEADERSHIP IN THE CONTEXT OF DIGITALIZATION OF PUBLIC ADMINISTRATION

Abstract. The article explores the impact of artificial intelligence (AI) technologies on the advancement of women's leadership within the digitalization process of Kazakhstan's public administration system.

The main goal of the analysis is to determine the influence of artificial intelligence on the development of women's leadership in public administration by identifying the relationship between the level of digitalization of management processes and the proportion of women in leadership positions.

The authors examined institutional and technological factors shaping the development of digital leadership, as well as the role of AI in reducing gender stereotypes and improving the quality of managerial decision-making.

A correlation-regression analysis conducted to assess the relationship between the increase in the number of women in leadership positions and the level of digital maturity (EGDI) revealed a statistically significant positive dependence ($r = +0.99$, $R^2 = 0.97$).

Special attention is given to both Kazakhstani and international initiatives aimed at integrating a gender component into digital strategies (Women in AI & GovTech, AI Federal Leadership Series, Women in Digital Forum).

Keywords: artificial intelligence, women's leadership, public administration, digitalization, gender equality, Kazakhstan

INTRODUCTION

In an era of rapid technological progress, artificial intelligence (AI) is playing an increasingly significant role in the modernization of management activities. Its application appears particularly promising in fostering women's leadership in the public sector, as female leaders possess a unique ability to integrate advanced digital solutions with principles of openness, empathy, and social responsibility.

The key role of artificial intelligence (AI) in the development and support of women's leadership within public administration lies in its capacity to reduce bias and provide objective data essential for well-informed decision-making. AI can analyze employee performance data, uncovering hidden talents and leadership potential among women that are often overlooked by traditional evaluation methods. Furthermore, AI tools can automate routine tasks, freeing up time for strategic planning and the cultivation of leadership skills among women.

LITERATURE REVIEW

In recent years, interest in this topic has grown significantly, as evidenced by the increasing number of scholarly studies examining the impact of AI on the creation of more equitable management strategies. Researchers such as E. Kelan and S. Gülser Korat emphasize that the full development of women's leadership requires active female participation in the digital modernization of public institutions. According to them, artificial intelligence can not only optimize decision-making processes but also serve as a catalyst for gender equality—provided that ethical standards and principles of inclusion are upheld in the governance sphere [1,2].

According to the study by S. Mohla, B. Bagh, and A. Guha, the impact of artificial intelligence on gender equality extends far beyond the mere elimination of bias in algorithms—it influences workplace organization, leadership styles, and the redistribution of power. The authors argue that if women do not actively participate in the development of digital technologies, they risk being excluded from key managerial and political decision-making processes. This makes the adoption of a gender-sensitive approach to AI governance essential [3].

Furthermore, the international organization Women at the Table (2025) emphasizes that women's leadership should play a central role in shaping public policy and regulatory frameworks related to artificial intelligence. From their perspective, involving women in decision-making processes allows them to move from a peripheral position to the forefront of technology development and oversight, contributing to the creation of more equitable and ethical digital solutions. This approach is particularly significant in public administration, where the integration of AI requires not only technical but also socially oriented innovations grounded in the values of equality and long-term stability [4].

Among domestic researchers exploring the relationship between gender development and the digital transformation of public administration, special attention should be given to the works of A. Sadvokassova (publications in Astana Hub and the International Journal of Computer Science and Research Publications). In her article "Women and Digitalization in the Public Sector," she analyzes women's participation in the digitalization processes of Kazakhstan's public sector and assesses the impact of GovTech and AI technologies on expanding opportunities for women's leadership [5].

Based on these studies, it can be concluded that artificial intelligence is transforming the sphere of governance, decision-making algorithms, human resource strategies, and the interaction between the state and its citizens—thus encompassing the key areas where leadership emerges and is realized.

METHODOLOGY AND METHODS

The analysis was conducted using a combination of theoretical and practical approaches aimed at identifying the relationship between the development of women's leadership and the digitalization of public administration in the context of integrating artificial intelligence technologies.

The study employed methods of analysis, synthesis, comparison, and statistical data processing.

The empirical base was compiled by the reviews of the Voluntary National Survey, Astana Hub Analytics, as well as data from the Bureau of National Statistics of the Republic of Kazakhstan.

To determine the correlation between women's leadership and the level of digital development, Pearson correlation and regression analyses were applied.

RESULTS

When examining global practices, there is a clear trend toward integrating a gender perspective into digital policy, which contributes to the advancement of women's leadership within government institutions. For example, in the United States, a leadership training program for public administration in AI strategies was launched in 2023 and continues as part of the AI Federal Leadership Series 2024–2025.

A key element of this program is ensuring the active participation of women leaders and representatives of underrepresented groups in the creation and implementation of AI projects, which aligns with the U.S. strategy of promoting diversity and inclusion. This creates favorable conditions for strengthening women's roles in decision-making processes related to digital technologies and artificial intelligence in the public sector. According to the AI Center for Government (Partnership for Public Service, 2024), the proportion of women among AI initiative leaders in federal agencies increased from 18% in 2022 to 27% in 2024. Therefore, the experience of the United States demonstrates that the development of women's leadership in the age of AI is inseparable from the integration of equality principles and digital literacy into the public administration system [6].

In Europe, the Connecting Women in Digital initiative was launched under the Digital Europe Programme, and in June 2025, the official Women in Digital Forum was inaugurated in Brussels. Within the framework of this forum, two specialized working groups are being established: the first focuses on ensuring equal opportunities in the field of information and communication technologies (ICT) in education—from primary school to higher education—while the second is dedicated to supporting and developing women in digital leadership [7].

In Singapore, gender-based KPIs have been introduced in the civil service to promote women's participation in digitalization projects. Between 2011 and 2023, the share of women in managerial positions within the ICT sector increased steadily—from 33.8% in 2011 to 39.8% in 2023—demonstrating an overall positive growth trend [8].

As for Kazakhstan, in recent years the government has shown a firm commitment to advancing artificial intelligence in public administration—from the digitalization of public services to the use of analytical tools in forming talent pools, monitoring performance, and developing long-term strategic plans.

President Kassym-Jomart Tokayev emphasizes that artificial intelligence is not merely a technology but a systemic factor of national development. In this sense, AI shapes new competencies and managerial approaches, offering women substantial opportunities for self-realization—particularly in areas such as ethics, data analysis, strategic forecasting, communications, and management [9].

Considering Kazakhstan's institutional architecture aimed at strengthening and promoting women's leadership amid the digital transformation of the public sector and the integration of AI technologies, it can be characterized as comprehensive and strategically coherent.

At the core of this mechanism is the national program Digital Kazakhstan (2018–2025), which has laid the foundation for modernizing public institutions and transitioning toward a "smart governance" model. Within this initiative, special attention is given to developing digital competencies among civil servants—especially women leaders—and encouraging their active involvement in implementing key digital platforms such as e-Gov, Smart Bridge, Open Data, and other projects aimed at enhancing transparency, accountability, and efficiency in administrative processes. According to the Academy of Public Administration, in 2024 nearly half (about 48%) of participants in the Digital Leadership and AI Governance training programs demonstrated an increase in women's influence in managing digital transformation within the state sector [10].

Another significant milestone was the approval of the Artificial Intelligence Development Concept for 2024–2029 by order of President Kassym-Jomart Tokayev. This document focuses on the development of human capital in the field of AI, the establishment of ethical standards for technology use, and the promotion of women's participation in the digital economy [11].

As a tool for enhancing women's leadership potential, artificial intelligence contributes to greater transparency and justification in managerial decision-making by reducing the influence of subjective factors and personal biases. In this regard, the development of women's leadership in Kazakhstan's public administration system in the era of artificial intelligence is closely interconnected with digitalization processes and the adoption of AI technologies—driven by a number of mutually reinforcing factors (Figure 1).

Figure 1. The cause-and-effect relationship between the growth of women's leadership and the outcomes of digitalization in public administration
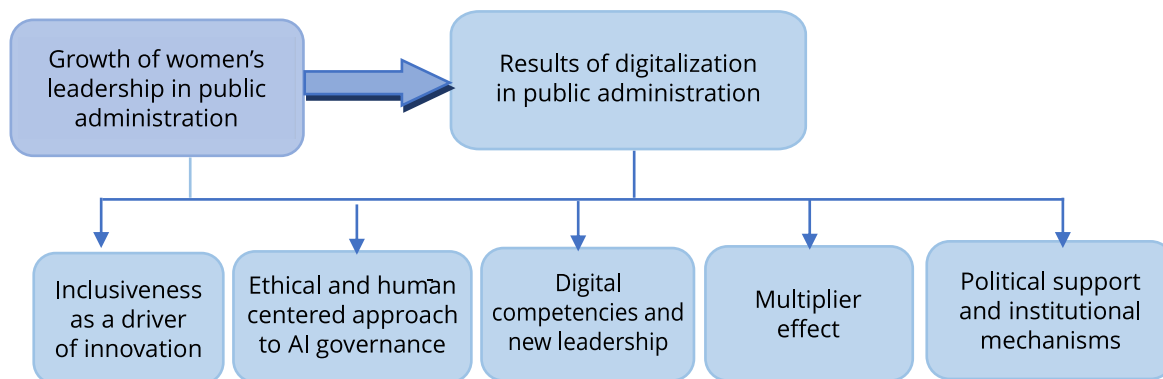
Over the past five years, Kazakhstan has recorded a steady increase in women's participation in the processes of digital modernization of the public sector. According Astana Hub Analytics, the share of women involved in government digital projects (GovTech, e-Gov, Smart Data Ukimet, AI4Gov) has grown from 27% in 2020 to 43% in 2024 (see Figure 2)

Figure 2. Dynamics of Women's Participation in Government Digital Initiatives in Kazakhstan

Share of women participating in public administration digital initiatives, %
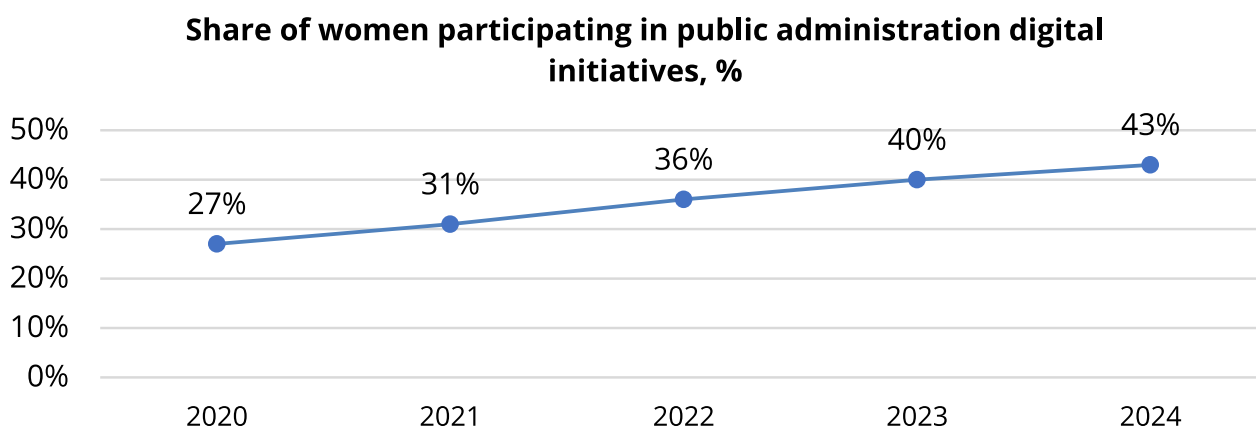
Note: The table was compiled by the authors based on [12,13].

The presented graph reflects a steady increase in women's involvement in Kazakhstan's public sector digitalization projects. This growth indicates not only quantitative changes but also a qualitative shift – the transition of women from executive and administrative positions to strategic and analytical roles within the digital divisions of various government agencies.

To confirm the actual relationship between the level of women's leadership development and the effectiveness of digital transformation in public administration, a study was conducted using the correlation analysis method (Pearson correlation coefficient).

$$R = \frac{\sum(X-\dot{X})(Y-\dot{Y})}{\sqrt{\sum(X-\dot{X})^2} * \sqrt{\sum(Y-\dot{Y})^2}} \quad (1)$$

This made it possible to quantitatively determine the strength, direction, and nature of the interdependence between the share of women leaders and indicators of digital maturity (for example, the E-Government Development Index (EGDI)) (Table 1).

Table 1. Calculation of Deviations and Products

Year	Women Leaders in Digital Projects (%) X	E-Government Development Index (EGDI) Y	$x-\bar{x}$	$y-\bar{y}$	$(x-\bar{x})(y-\bar{y})$	$(x-\bar{x})^2$	$(y-\bar{y})^2$
2020	14	0.76	-6.8	-0.04	0.272	46.24	0.00016
2021	17	0.78	-3.8	-0.02	0.076	14.44	0.0004
2022	21	0.80	0.2	0.00	0.000	0.04	0.0000
2023	25	0.82	4.2	0.02	0.084	17.64	0.0004
2024	27	0.84	6.2	0.04	0.248	38.44	0.0016
∑	20.8	0.80	0	0	0.68	116.8	0.004
Note: The table was compiled by the authors based on							

Pearson Correlation Coefficient [14]:

$$r = \frac{0.68}{\sqrt{(116.8 \times 0.004)}} = \frac{0.68}{0.69} = 0.99$$

An analysis of data for the period from 2020 to 2024 reveals a pronounced positive correlation between the increase in the number of women in leadership positions and the E-Government Development Index (EGDI) in the Republic of Kazakhstan.

The results of the correlation analysis demonstrated a statistically significant relationship between the development of women's leadership and the EGDI indicator. However, the identified correlation does not provide insight into the degree or nature of the influence these variables exert on each other.

Therefore, the next stage of the research involved conducting a regression analysis aimed at assessing the extent to which the share of women leaders influences the E-Government Development Index (EGDI).

Univariate Regression:

$$EGDI = \beta_0 + \beta_1 \times X + \varepsilon \quad (2)$$

Where:
X – share of women in leadership positions (%),
β_0 – constant term,
β_1 – influence coefficient,
ε – standard error [15].

Table 2. Results of Linear Regression Analysis of the Relationship Between Women's Leadership and the Level of Digitalization (2020–2024)

Indicator	Coefficient (β)	Standard Error	Significance Level	Interpretation
Constant (β0)	0.646	0.008	< 0.001	Baseline value of the EGDI index at zero level of women's leadership
Share of Women Leaders (%) (β1)	0.0074	0.0005	< 0.01	With a 1% increase in the share of women, the EGDI increases by 0.0074
R²	0.97	-	-	The model explains 97% of the variation in digital development
Note: The table was compiled by the authors based on				

The combined correlation and regression analysis revealed a significant positive relationship between the number of women in leadership positions and digital maturity indicators (EGDI index). The data indicate that expanding the role of women in digital projects has a direct impact on the effectiveness of digital transformation in the public sector. Leadership characterized by openness, empathy, and social responsibility ensures a more stable and well-considered implementation of new technologies, including artificial intelligence–based solutions.

DISCUSSION AND CONCLUSIONS

As the analysis shows, the EGDI – including the influence of artificial intelligence – has a positive effect on the promotion of women's leadership in the civil service. However, several factors hinder the full realization of this potential. These include unequal access of women to digital technology skills and specialized AI education programs, insufficient female representation in government bodies that define digital development strategies, and existing regulatory and sociocultural norms that limit women's involvement in implementing advanced technological solutions.

To ensure the active engagement of women in digital modernization, a coordinated approach is required—one that includes reforms in legislation, education, and public attitudes:

1. Modernization of state human resources and digital policy should include the integration of gender-related aspects into national digitalization and artificial intelligence development plans, as well as the establishment of a monitoring system to track women's representation in digital transformation and AI implementation initiatives within government institutions.

2. Development of a national "Women and AI" index. It is necessary to introduce a Gender Digital Inclusion Index that measures women's participation in AI projects, their level of digital literacy, access to technology, and representation in managerial positions.

3. Support for the hybrid leadership model (Human–AI Leadership). It is essential to integrate an approach in which decisions are made jointly by humans and AI systems. Women leaders can make a significant contribution to ensuring ethics and human-centeredness in the development of digital strategies, promoting a balance between technological efficiency and social responsibility in public administration.

4. Shaping the image of the "Digital Woman Leader" through media and government initiatives. State and independent media should be actively involved in creating an inspiring image of a modern female leader working in the era of artificial intelligence—highlighting her professionalism, innovation, and commitment to public good. This contributes to breaking long-standing stereotypes and encourages young women to participate in digitalization processes.

5. Development of international and cross-sector partnerships. It is necessary to strengthen cooperation with international organizations such as the UN, UNESCO, and OECD to promote gender equality in digital governance [16].

The conducted research has demonstrated that the use of artificial intelligence (AI) technologies exerts a complex and multifaceted influence on the functioning of public administration, shaping innovative methods of decision-making, personnel development, and strategy formation. In the digitalization era, AI serves as a crucial factor driving the renewal of governance methods and the promotion of gender equality. Therefore, artificial intelligence should be viewed not merely as a technological modernization tool, but also as a catalyst for social transformation — including the emergence of fundamentally new models of women's roles in state governance.

Referenses

1. Kelan, E. Patterns of Inclusion: How Gender Matters for Automation, Artificial Intelligence and the Future of Work / E. Kelan. – London; New York: Routledge, 2024. – 184 p.

2. Corat, S. Gülser. Artificial Intelligence and Gender Equality: Key Findings of UNESCO / S. Gülser Corat. – Paris: UNESCO, 2020. – 60 p.

3. Mohla, S., Bagh, B., Guha, A. Thinking beyond Bias: Analyzing Multifaceted Impacts and Implications of AI on Gendered Labour, 2024.

4. Women at the Table (W@TT). Multilateral Leadership in AI and Gender Equality // Women at the Table. – 2025.

5. Sadvokassova, A. Women and Digitalization in the Public Sector / A. Sadvokassova. – International Journal of Computer Science and Research Publications, Astana Hub, 2024. – № 4. – P. 34–45.

6. AI Center for Government (Partnership for Public Service). Increase in women leaders in AI initiatives in U.S. federal agencies: from 18 % in 2022 to 27 % in 2024 / AI Center for Government, Partnership for Public Service. – 2024.

7. Connecting Women in Digital (Digital Europe Programme). Launch of forum Women in Digital Forum, Brussels, June 2025 / Connecting Women in Digital, Digital Europe Programme. – 2025.

8. Government of Singapore. KPI on female participation in ICT leadership in public service: statistics 2011–2023 / Government of Singapore. – 2023.

9. Tokaev, K. Zh. Iskusstvennyi intellekt – eto uzhe ne nauchnaya fantastika, a nastupivshaya real'nost': vystuplenie na forume Digital Bridge 2023, g. Astana / K. Zh. Tokaev. – Astana: Press-sluzhba Prezidenta RK, 13 okt. 2023.

10. Tsifrovoi Kazakhstan: Gosudarstvennaya programma na 2018–2025 gody. – Astana: Ministerstvo tsifrovogo razvitiya, innovatsii i aerokosmicheskoi promyshlennosti Respubliki Kazakhstan, 2017. – 82 s.

11. Kontseptsiya razvitiya iskusstvennogo intellekta na 2024–2029 gody. – Postanovlenie Pravitel'stva RK ot 24 iyulya 2024 goda № 592.

12. Dobrovol'nyy natsional'nyy obzor po dostizheniyu Tseley ustoychivogo razvitiya. – Astana: Ministerstvo natsional'noy ekonomiki Respubliki Kazakhstan, 2022. – 120 s.

13. Astana Hub Analytics. Gender and Innovation Report 2025 [Electronic resource]. – Astana: Astana Hub, 2025. – URL: https://astanahub.com

14. Pirson, K. O. Matematicheskaya teoriya evolyutsii. Ocherki po matematicheskoi teorii korrelyatsii i nasledstvennosti / K. Pirson. – M.: Nauka, 1977. – 312 s.

15. Dubrov, A. M., Mkhitaryan, V. S., Troshin, L. I. Mnogomernye statisticheskie metody: uchebnoe posobie. – M.: Finansy i statistika, 2019. – 352 s.

16. Ministerstvo iskusstvennogo intellekta i cifrovogo razvitiya Respubliki Kazahstan. Nacionalnaya strategiya razvitiya iskusstvennogo intellekta na 2023-2030 gody. – Astana, 2023. – 68 s.

Список использованных источников

1. Келан, Э. Patterns of Inclusion: How Gender Matters for Automation, Artificial Intelligence and the Future of Work / Э. Келан. – Лондон; Нью-Йорк: Routledge, 2024. – 184 с.

2. Корат, С. Гюльсер. Artificial Intelligence and Gender Equality: Key Findings of UNESCO / С. Гюльсер Корат. – Париж: UNESCO, 2020. – 60 с.

3. Мохла, С., Баг, Б., Гуха, А. Thinking beyond Bias: Analyzing Multifaceted Impacts and Implications of AI on Gendered Labour, 2024.

4. Women at the Table (W@TT). Multilateral Leadership in AI and Gender Equality // Women at the Table. – 2025.

5. Садвокасова, А. Women and Digitalization in the Public Sector / А. Садвокасова // International Journal of Computer Science and Research Publications, Astana Hub. – 2024. – № 4. – С. 34–45.

6. AI Center for Government (Partnership for Public Service). Increase in women leaders in AI initiatives in U.S. federal agencies: from 18 % in 2022 to 27 % in 2024 / AI Center for Government, Partnership for Public Service. – 2024.

7. Connecting Women in Digital (Digital Europe Programme). Launch of forum Women in Digital Forum, Brussels, June 2025 / Connecting Women in Digital, Digital Europe Programme. – 2025.

8. Government of Singapore. KPI on female participation in ICT leadership in public service: statistics 2011–2023 / Government of Singapore. – 2023.

9. Токаев, К. Ж. Искусственный интеллект – это уже не научная фантастика, а наступившая реальность: выступление на форуме Digital Bridge 2023, г. Астана / К. Ж. Токаев. – Астана: Пресс-служба Президента РК, 13 окт. 2023.

10. Цифровой Казахстан: Государственная программа на 2018–2025 годы. – Астана: Министерство цифрового развития, инноваций и аэрокосмической промышленности Республики Казахстан, 2017. – 82 с.

11. Концепция развития искусственного интеллекта на 2024–2029 годы. – Постановление Правительства РК от 24 июля 2024 года № 592.

12. Добровольный национальный обзор по достижению Целей устойчивого развития. – Астана: Министерство национальной экономики Республики Казахстан, 2022. – 120 с

13. Astana Hub Analytics. Gender and Innovation Report 2025 [Электронный ресурс]. – Астана: Astana Hub, 2025. – Режим доступа: https://astanahub.com

14. Пирсон, К. О. Математическая теория эволюции. Очерки по математической теории корреляции и наследственности / К. О. Пирсон. – М.: Наука, 1977. – 312 с.

15. Дубров, А. М., Мхитарян, В. С., Трошин, Л. И. Многомерные статистические методы: учебное пособие. – М.: Финансы и статистика, 2019. – 352 с.

16. Министерство искусственного интеллекта и цифрового развития Республики Казахстан. Национальная стратегия развития искусственного интеллекта на 2023-2030 годы. – Астана, 2023. – 68 с.

ВЛИЯНИЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА НА РАЗВИТИЕ ЖЕНСКОГО ЛИДЕРСТВА В КОНТЕКСТЕ ЦИФРОВИЗАЦИИ ГОСУДАРСТВЕННОГО УПРАВЛЕНИЯ

Ескерова З.А.*
докторант
Карагандинский национальный
исследовательский университет имени
академика Е.А.Букетова
Караганда, Казахстан
e-mail: zamirra_e@mail.ru
ORCID: 0000-0001-6870-6390

Акыбаева Г.С.
к.э.н. Astana IT University
Астана, Казахстан
e-mail: akubaeva_g@mail.ru
ORCID:0000-0001-8201-3638

Мамбетова С.Ш.
к.э.н.
Карагандинский национальный
исследовательский университет имени
академика Е.А.Букетова
Караганда, Казахстан
e-mail:sagynysh.2012@mail.ru
ORCID:0000-0009 -0877-1137

Аннотация. В статье исследуется воздействие технологий искусственного интеллекта (ИИ) на прогресс женского лидерства в процессе цифровизации системы государственного управления Казахстана.

Основная цель анализа определить влияние искусственного интеллекта на развитие женского лидерства в системе государственного управления Казахстана, выявив взаимосвязь между уровнем цифровизации управленческих процессов и степенью участия женщин в руководящих должностях.

Авторы изучили институциональные и технологические факторы, определяющие развитие цифрового лидерства, а также роль ИИ в уменьшении гендерных стереотипов и совершенствовании качества управленческих решений. Корреляционно-регрессионный анализ, проведенный для оценки взаимосвязи между увеличением числа женщин на руководящих должностях и уровнем цифровой зрелости (EGDI), выявил статистически значимую прямую зависимость (r = +0.99, R^2 = 0.97).

Особое внимание уделено как казахстанским, так и международным проектам, направленным на включение гендерного компонента в цифровую стратегию (Women in AI & GovTech, AI Federal Leadership Series, Women in Digital Forum).

Ключевые слова: искусственный интеллект, женское лидерство, государственное управление, цифровизация, гендерное равенство, Казахстан.

МЕМЛЕКЕТТІК БАСҚАРУДЫ ЦИФРЛАНДЫРУ КОНТЕКСТІНДЕ ЖАСАНДЫ ИНТЕЛЛЕКТІҢ ӘЙЕЛДЕР КӨШБАСШЫЛЫҒЫН ДАМЫТУҒА ӘСЕРІ

Ескерова З. А.*
докторант
Академик Е. А. Бөкетов атындағы
Қарағанды ұлттық зерттеу университеті
Қарағанды, Қазақстан
e-mail:zamirra_e@mail.ru
ORCID: 0000-0001-6870-6390

Акыбаева Г. С.
э.ғ.к.
Astana IT University
Астана, Қазақстан
e-mail: akubaeva_g@mail.ru
ORCID:0000-0001-8201-3638

Мамбетова С. Ш.
э.ғ.к.
Академик Е. А. Бөкетов атындағы
Қарағанды ұлттық зерттеу университеті
Қарағанды, Қазақстан
e-mail:sagynysh.2012@mail.ru
ORCID:0000-0009 -0877-1137

Аңдатпа. Мақалада Қазақстанның мемлекеттік басқару жүйесін цифрландыру үдерісінде жа-санды интеллект (ЖИ) технологияларының әйелдер көшбасшылығының ілгерілеуіне әсері зерттеледі.

Зерттеудің негізгі мақсаты – басқару процестерін цифрландыру деңгейі мен әйелдердің бас-шылық лауазымдардағы үлесі арасындағы өзара байланысты айқындай отырып, жасанды интеллектің мемлекеттік басқару жүйесіндегі әйелдер көшбасшылығын дамытуға ықпалын анықтау.

Авторлар цифрлық көшбасшылықтың дамуын айқындайтын институционалдық және техноло-гиялық факторларды, сондай-ақ гендерлік стереотиптерді азайту мен басқарушылық шешім-дердің сапасын арттырудағы ЖИ рөлін зерттеді.

Басшылық лауазымдардағы әйелдер санының артуы мен цифрлық жетілу деңгейі (EGDI) ара-сындағы өзара байланысты бағалау үшін жүргізілген корреляциялық-регрессиялық талдау ста-тистикалық тұрғыдан мәнді тікелей тәуелділікті анықтады (r = +0.99, R² = 0.97).

Арнайы назар гендерлік компонентті цифрлық стратегияға енгізуге бағытталған қазақстандық және халықаралық жобаларға аударылды (Women in AI & GovTech, AI Federal Leadership Series, Women in Digital Forum).

Түйін сөздер: жасанды интеллект, әйел көшбасшылығы, мемлекеттік басқару, цифрландыру, гендерлік тепе-теңдік, Қазақстан.