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## KAZAKHSTAN'S PRACTICE OF DIGITAL TOOLS FOR DEVELOPING THE BUSINESS ENVIRONMENT

**Abstract.** The purpose of this study is to explore the use of digital tools for business growth in Kazakhstan, in the context of the transition towards a digital economy and the creation of an innovative business environment. This work is timely, as digital technologies are becoming increasingly important for ensuring the competitiveness of national economies and enhancing the efficiency of business operations. By conducting this research, we hope to contribute to a better understanding of the digital transformation of business environments in emerging markets, and to identify specific features of implementing digital solutions in Kazakhstan. Additionally, this study will provide a comprehensive analysis of the impact of digital tools on entrepreneurship and investment attractiveness in the country for the first time. The practical significance of this research lies in the potential for its findings to be utilized by government agencies, business owners, and investors. By applying the results of this study, they can develop digital strategies, enhance support systems for small and medium-sized enterprises (SMEs), and improve the effectiveness of implementing innovative technologies. The research is based on a comprehensive approach that combines scientific literature analysis, systematic and comparative methods, analytical techniques, and surveys of business owners. This integrated approach allows us to evaluate the current state of the digital landscape, identify trends in its evolution, and assess the impact of digitalization on business activities. The study shows that Kazakhstan has established a solid foundation for its transition to a digital economy. This has been achieved through the development of various digital services, including eGov, e-Licensing, and Kасpi.kz. These services aim to increase transparency in business operations, simplify interactions with government agencies, and speed up financial transactions.

**Keywords:** Digital transformation, business environment, digital tools, digital economy, electronic government, human capital, sustainable development.

### Introduction

The economy of Kazakhstan is undergoing a process of digital transformation, with the increasing importance of digital tools for enhancing the competitiveness and long-term sustainability of businesses. This necessitates the integration of digital technologies into business operations in order to reduce barriers, enhance quality management, and promote innovation.

Kazakhstan aims not only to adopt state-of-the-art technologies but also to tailor them to meet the specific needs of its domestic market. The goal is to create an environment conducive to entrepreneurship, supporting the harmonious interaction between economic growth, businesses, and society.

The current study aims to explore the use of digital tools in Kazakhstan, specifically focusing on assessing their impact on business growth. Furthermore, it seeks to identify promising strategies to enhance the country's investment attractiveness and promote its innovative potential.

This research holds substantial significance in advancing theoretical frameworks for comprehending the digital transformation of business environments. The study offers valuable insights into how digital instruments can enhance business performance, elucidating the intricate relationship between digitalization and structural economic transformations. Moreover, it contributes

to the development of methodological approaches for analyzing digital ecosystems within emerging markets.

The scientific novelty of this study is the systematic analysis of Kazakhstan's experience with digital tools for promoting entrepreneurship. I conducted a comprehensive evaluation of various solutions such as e-government, electronic licensing systems, business platforms, and financial technology (FinTech) services to assess their effectiveness. Through this research, we were able to establish criteria for measuring the digital maturity of businesses and identify factors that contribute to innovation and competitiveness.

The practical ramifications of this investigation are manifold and hold significant implications for governmental bodies, corporate executives, and entrepreneurial ventures alike, as they provide a valuable framework for formulating strategic approaches to economic expansion. The findings of this study have the potential to enhance governmental efforts in facilitating the digital transformation of enterprises, implementing cutting-edge digital platforms, and leveraging e-commerce solutions. Moreover, these findings can contribute to the advancement of regional initiatives aimed at fostering the growth and development of small and medium-sized enterprises.

The study reveals that Kazakhstan is vigorously implementing digital services to optimize business operations. These initiatives encompass electronic government services, an electronic licensing system, digital platforms tailored for entrepreneurs, financial technology solutions, and government technological endeavors.

These measures aim to enhance transparency in business practices, streamline transaction processes, alleviate administrative burdens, and foster improved interactions between government agencies and businesses. Despite challenges such as connectivity issues, access to cutting-edge solutions, and the digital literacy of business owners, the study underscores the significance of digital tools for fostering business growth in Kazakhstan.

The research emphasizes the potential of these digital tools to boost efficiency, promote transparency, and stimulate innovation within the business landscape, contributing to the overall economic development of Kazakhstan and enhancing its global standing.

### **Materials and methods**

To gain a deeper understanding of how digital tools are used in the business environment, the study used an integrated approach that includes four interrelated research methods: analytical, comparative, sociological, and systems analysis. Each of these methods provides a unique perspective on the problem, covering theoretical, empirical and practical aspects.

The analytical method is aimed at studying the essence, structure and trends of digital transformation in the business environment of Kazakhstan. Within the framework of this method, regulatory documents such as the Digital Kazakhstan program provided by international organizations such as the OECD, the World Bank and the UNDP are considered.

This method enables us to evaluate the presence of digital instruments, pinpoint impediments such as infrastructure, organizational structure, and personnel, and scrutinize the effect of digital transformation on operational procedures.

A comparative method was used to compare Kazakhstan's experience in the field of digitalization with other countries. The analysis examined both the countries located on the territory of Kazakhstan (Uzbekistan and Georgia) and the countries with which Kazakhstan has experience of cooperation (Estonia and South Korea).

This approach helps to identify the strengths and weaknesses of national digitalization strategies, as well as successful practices that could be adapted in Kazakhstan. For example, a comparative analysis shows that Estonia has achieved a high level of digital governance thanks to the X-Road platform, which is currently being developed in Kazakhstan.

The sociological methodology involves conducting surveys, interviews, and questionnaire-based research with entrepreneurs, corporate executives, and government officials. The aim is to

evaluate their proficiency in digital literacy, attitudes towards digital tools, and obstacles that prevent active utilization.

This method is particularly valuable for understanding the perception of digital technologies within enterprises. Statistical data may not always accurately reflect real-world challenges, so the findings from surveys can reveal issues such as poor internet connectivity and lack of training programs in certain regions despite the presence of digital platforms.

These insights allow for a comprehensive analysis of factors associated with the digital transformation process.

A systematic approach is used to study digitalization as a complex process that includes the interaction of government, industry, society, and employment.

In today's business environment, where digital technologies play a key role, it is becoming increasingly clear that all market participants – from large corporations to startups — are interconnected.

This allows us to consider the business environment as a single system, where digital tools act as a link between various stakeholders.

Systems analysis becomes the basis for growth, given the interdependencies between technological advances, management systems, regulatory frameworks, and human capital. This method can show how the development of fintech services, government initiatives and startup incubators together create an environment conducive to entrepreneurship.

The integrated application of these approaches allows not only to assess the current state of digital transformation, but also to obtain practical information to improve the effectiveness of digital tools in the business space of Kazakhstan.

## Discussion

Recent studies on the digitalization of business landscapes highlight the growing significance of digital tools in boosting the effectiveness of entrepreneurial endeavors, particularly in developing nations. In Kazakhstan, local scholars are actively exploring this topic, analyzing both the broader patterns of digital transformation and the potential obstacles posed by technological advancements for small and medium-sized businesses.

Kazbekova D's work shows that digitalization is crucial for the success of SMEs (small and medium-sized businesses) (Kazbekova D. et al., 2024:257). She points out that while there's been progress with programs and initiatives, companies still face challenges like limited resources, lack of digital skills, and poor tech infrastructure. So, she emphasizes the need for more government support, educational programs, and digital hubs to help businesses transition to digital economy.

In their article «Industry 4.0: Challenges and Opportunities for Small and Medium Enterprises in Kazakhstan», the authors delve deep into the analysis of the current state of digital support for businesses in Kazakhstan and the factors that affect its development (Turkyilmaz A. et al., 2021:215).

They emphasize that despite the existence of the strategic initiative «Digital Kazakhstan», some small and medium enterprises (SMEs) are still at the early stages of their digital transformation. The primary challenges they face include lack of financial resources, lack of motivation for digitalization, and absence of digital culture within their organizations.

To promote economic growth, the authors propose an integrated approach that includes legislative improvements, creation of favorable employment conditions, and implementation of training programs for entrepreneurs.

The research conducted by Bakytzhanova A. and Alimbekova G. on «Regional identity and national unity in Kazakhstan: overcoming income inequality and future prospects» is of great interest (3. Bakytzhanova A., Alimbekova G., 2025:40). The study revealed differences in the level of digitalization between advanced regions such as Almaty, Astana and Atyrau, and less developed territories where digital business support is still limited.

The researchers draw attention to the fact that skin color is one of the main barriers to the

sustainable development of the business environment. They emphasize the need for targeted support to promote the introduction of digital technologies in these regions.

Scientists from other countries are studying the impact of digital technologies on changing entrepreneurial ecosystems in these regions (Zahra S. A., Liu W., Si S., 2023:102457, Zhang J., van Gorp D., Kievit H., 2023:1080, Shahzad M. F. et al., 2025:785, Chaudhuri R. et al., 2023:300, Ferreira J. J. M., Fernandes C. I., Veiga P. M., 2023:113603).

Scientists have discovered that the digital proficiency of entrepreneurs is directly linked to the success of their business models and the long-term viability of their companies. They argue that effective digital transformation requires not only a technological foundation but also government support, the development of digital abilities, and specialized training programs.

The article by Telukdarie A. et al. explores the opportunities and obstacles presented by digitalization for small and medium-sized enterprises (SMEs) (Telukdarie A. et al., 2023:691). The authors highlight that digitalization reduces transaction costs, facilitates entry into new markets, and expands the global network of connections. They also acknowledge that limited resources and skills within SMEs remain a significant challenge, limiting the potential for digital innovation.

To sum up, the researchers stress the significance of strategic planning, investing in training, and fostering a supportive organizational culture to effectively implement digital tools.

The research findings indicate that both Kazakh and international scholars concur that digitalization is crucial for enhancing the effectiveness and sustainability of business operations. However, there are structural issues in Kazakhstan that impede the development of digital tools, such as limited employment opportunities and uneven regional development.

International best practices demonstrate that successful digital transformation necessitates a holistic approach that encompasses technological, educational, and institutional support. It is imperative to tackle these obstacles to fully harness the potential of digital technologies.

The overall conclusion is that for Kazakhstan to successfully grow its business assets, it must not only embrace digital technologies but also foster a supportive environment. This encompasses government assistance, the cultivation of human capital, and enhancing the digital capabilities of businesses. Only by adopting a holistic approach that integrates all these elements can the country ensure the sustainable growth of its economy in the face of global competition.

### **Research results**

The analytical method indicates a consistent trend towards digitalization in business operations in Kazakhstan in recent years. A review of official documents such as the Digital Kazakhstan national program and data from the World Bank and OECD shows that digital technologies improve transparency, reduce obstacles, and promote entrepreneurship.

Special attention has been paid to the evolution of digital platforms like eGov, e-License, Kaspi.kz, and E-Salyq, which are expected to contribute to modern business structures' development. The results of this analysis are presented in Table 1.

eGov.kz is the official government portal that provides over 700 public services for citizens and businesses (Kurmanov B., Rakhmetov B., 2026:88). This portal helps to reduce administrative barriers and save entrepreneurs time by automating interactions with government agencies. It also increases transparency and efficiency in government processes.

e-License is a single electronic licensing system that allows businesses to apply for and obtain permits and licenses online. The platform supports over 200 types of licenses, covering various sectors such as construction, transportation, and finance. Businesses can monitor the status of their applications and stay informed about the progress of their licenses.

Kaspi.kz is Kazakhstan's leading private financial technology company offering a wide range of services, including payments, marketplaces, and banking solutions (Dmitrievna S. A. et al., 2025:347).

E-Salyq is a mobile app developed by the State Revenue Service that allows users to file tax reports electronically and automatically calculate taxes. It also sends notifications about debts and fines, helping businesses stay on top of their tax obligations and avoid penalties. By facilitating tax reporting and improving payment discipline, E-Salyq reduces the burden on businesses, particularly smaller ones.

The sharing of e-Government and e-Licensing platforms, such as Kaspi.kz and E-Salyq, is creating a digital ecosystem where governments, businesses, and citizens can interact through clear, fast, and automated processes. These platforms are driving the development of the business environment in Kazakhstan, promoting greater trust, and improving and enhancing the country's digitalization rankings.

Table 1 – Indicators of Business Environment Digitalization in Kazakhstan (2018–2024)

Indicator	2018	2020	2022	2024
The number of active eGovernment users (in millions)	8.1	9.5	11.2	12.8
The level of digitalization of business services (as reported by the Ministry of Digital Development, Innovation, and Aerospace Industry)	45	62	73	85
Percentage of enterprises that use online payments	38	54	68	79
Average time taken for business registration	5.6	4.2	2.7	1.8
Digital accessibility index (according to the OECD)	58	63	69	75

These tables show that over the past six years, Kazakhstan has made significant progress in the field of digital employment. The number of people using government electronic services has increased by nearly 60%, and the level of digitization of business services has almost doubled. This indicates a shift in how public administration and business support are organized.

The reduction in the timeframe necessary for business registration, from five and a half days to just over one day, has significantly enhanced the effectiveness of digital tools. This development has a positive impact on the investment climate in the country. The increase in the digital amenities index reflects the commitment to improving the environment for small and medium-sized businesses in the digital sphere.

Employing analytical methods not only facilitates the emergence of digital transformations but also allows for a quantitative assessment of the impact of digital tools on business environments in Kazakhstan. These findings demonstrate that integrating digital technologies enhances the competitiveness and resilience of the national economy, making it more adaptive to changing market conditions.

A comparative analysis was conducted to evaluate the outcomes of digitalization in business assets in Kazakhstan compared to other countries, such as Estonia, South Korea, Uzbekistan, and Georgia (in table 2). This analysis aimed to identify differences and similarities in approaches to digital transformation, as well as to highlight the strengths of each model.

The analysis delved into several critical domains:

- \* The degree of governmental digital transformation and the adoption of digital platforms;
- \* The swiftness and efficacy of digital service delivery;
- \* Enterprises' trust in electronic instruments;
- \* Innovation advancement and digital proficiency.

By comparing these aspects, we can identify areas where Kazakhstan could improve its digital transformation efforts and areas where it can learn from other countries.

Table 2 – Comparative analysis of the digitalization of the business environment of the countries

Indicator / Country	Kazakhstan	Estonia	South Korea	Uzbekistan	Georgia
The consolidation of public services	Medium level: eGov, e-License, and E-Salyq platforms operate separately	High, unified X-Road system connects all public services	High: unified “Government 24” platform	Medium: digitalization at the ministerial level	Medium: My.gov.ge portal operates
The extent of business digital proficiency.	Increasing, but uneven among SMEs	Very high, supported by state programs	High: mass training and incentives	Low, early stage	Medium, growing
The pace of public service provision.	Average: business registration takes about 2 days	High: online registration < 1 day	Very high: services available 24/7	Average	Average
Proportion of companies adopting digital payment methods (%)	80 %	95 %	98 %	60 %	70 %
The degree of confidence in online platforms.	72 % (OECD data)	94 %	90 %	64 %	68 %
Cybersecurity and information security	Developing, national standards being implemented	Very high level	Very high level	Medium	Medium

A comparative study revealed that Kazakhstan is making substantial strides in the realm of digitalization, particularly in the areas of online payments and reducing bureaucratic obstacles. However, the main setback lies in the integration of digital systems and building user confidence.

Unlike Estonia and South Korea, where a unified digital infrastructure is managed by the government, the digital landscape in Kazakhstan remains fragmented, making it challenging to share data and deliver comprehensive business services (Kosherbayeva A., Kylbayev Y., 2025:236).

The study also showed that Kazakhstan is ahead of Uzbekistan and Georgia in terms of the availability of digital services and the number of users of online platforms. However, it falls behind the leaders in terms of cybersecurity and digital proficiency.

Employing the comparative approach enabled:

to pinpoint areas where Kazakhstan has already achieved success, such as digital payments and reducing business registration time.

to highlight areas that require improvement, such as platform integration, data protection, and digital education.

to propose the adoption of best international practices, including the X-Road model (Estonia) and the Government 24 integrated services system (South Korea).

The sociological method used within the framework of this topic involved conducting surveys and interviews with entrepreneurs, small and medium-sized business managers, and representatives of government agencies in various regions of Kazakhstan. The purpose of this method was to:

1. Determine the level of digital literacy among entrepreneurs.
2. Assess the perception and willingness of businesses to use digital tools.
3. Identify the main barriers and needs in the process of digitalization.

The survey was conducted in 2024 and included 100 participants from Astana, Almaty,

Shymkent, and other regional centers (in table 3- figure 1).

Table 3. Survey results on entrepreneurs' use of digital tools (in %)

Indicator	High Level	Medium Level	Low Level
The extent of digital proficiency.	65	38	20
The widespread adoption of online platforms (eGov, Kaspi.kz, e-License)	65	25	10
Satisfaction in Digital services	58	30	12
Evaluation of the availability of online infrastructure	47	33	20
Readiness to invest in the digital transformation of business.	36	40	24

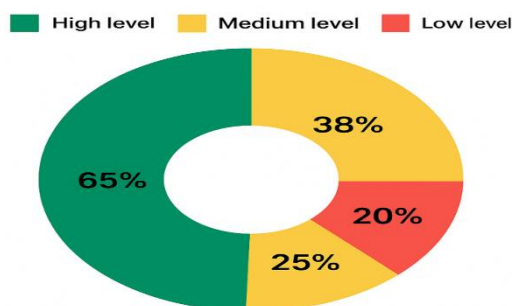


Figure 1. Survey results on entrepreneurs' use of digital tools (in %)

A study of the survey results showed that 65% of companies are actively using digital platforms. Among them, the most popular are Kaspi.kz and eGov. This indicates that trust in electronic services and the digital environment is growing in Kazakhstan.

Only 65% of the respondents demonstrated a high level of digital technology proficiency. This highlights the need for educational initiatives and digital skills development to ensure equal participation in the digital economy.

58% of respondents are satisfied with the quality of digital services, which indicates an overall positive trend towards the introduction of technology in business. However, about 20% of companies reported limited Internet access, especially in rural areas. This prevents them from making full use of digital platforms.

During the analysis of companies' willingness to invest in digitalization, only a third of the respondents expressed a desire to invest in digital transformation. This indicates a lack of financial support and incentives for small and medium-sized enterprises that are hesitant to invest in technology due to uncertainty and limited access to capital.

The study also showed the presence of significant socio-economic barriers, which are not always reflected in official statistics. These include uneven Internet access, insufficient educational initiatives, and financial difficulties for SMEs.

These results highlight the need for an integrated approach to the development of the digital business environment in Kazakhstan. It should include not only the development of technological infrastructure and political support, but also efforts to develop digital culture, education and entrepreneurship among the business community.

The sociological methodology proved to be particularly effective in elucidating real-world challenges and behavioral patterns within the context of Kazakhstan's digital transformation in the business landscape. The findings suggest that augmenting human capital through educational

initiatives, financial inclusion, and equitable access to digital infrastructure are critical for fostering the sustainable development of Kazakhstan's digital economy.

Utilizing a systematic approach enabled a comprehensive examination of digitalization as a multifaceted phenomenon that encompasses interactions between governmental entities, businesses, civil society, and technological infrastructures. The research demonstrated that Kazakhstan's digital ecosystem operates as an integrated system, with digital instruments serving as pivotal connectors among various stakeholders in the realm of entrepreneurship. Within this context, the FinTech sector, electronic government services, and incubators for startups collaborate to create a milieu conducive to business growth and fostering innovation.

The study has revealed that the integration of these elements enhances the clarity, efficacy, and user-friendliness of business operations. The framework for digital transformation, derived from the analysis, highlights the intricate interplay between technological advancement, administrative processes, regulatory frameworks, and human capital development levels.

For instance, the widespread adoption of platforms like Kaspi.kz and eGov markedly expedites communication between government entities and business proprietors, streamlining administrative procedures and fostering digital entrepreneurship.

The analysis of the system revealed that the sustainable growth of digital technologies in Kazakhstan is dependent on the coordinated efforts of government policies, business initiatives, and social adaptation mechanisms. These elements collectively create the foundation for a thriving and innovative business landscape.

The exploration of the findings, derived from a multifaceted research methodology, which includes a comprehensive review of relevant literature, a systematic approach, a comparative analysis, and a sociological investigation, has provided a profound understanding of how digital tools are reshaping the business environment in Kazakhstan.

A review of the existing literature shows that both Kazakh and international scholars emphasize the growing importance of digitalization in modernizing the country's economic landscape. A critical examination of these works reveals a shared view that digital transformation goes beyond technological advancements and also encompasses social and institutional aspects.

The systematic review has provided a comprehensive analysis of the digital landscape in Kazakhstan, revealing it to be a complex ecosystem where government policies, business initiatives, and technological advancements interact dynamically. This analysis has identified critical interdependencies, such as increased digital literacy, reliable internet connectivity, and supportive legal frameworks, which contribute to the overall efficiency of the entrepreneurial ecosystem.

This approach allows us to understand how improvements in one aspect of the system lead to advancements in others, forming a self-sustaining cycle of innovation. A comparative analysis with other emerging economies highlights Kazakhstan's progress in developing digital infrastructure, yet it also reveals challenges in achieving digital inclusivity and providing equal opportunities for SMEs.

Nations such as Estonia and Singapore have successfully incorporated digital services into their economic activities, whereas Kazakhstan continues to grapple with issues related to disparities in regional development and restricted access to capital for startups (Ualtayev M. D. et al., 2025:4).

The sociological survey supported the theoretical findings with empirical evidence. According to the data collected, 65% of entrepreneurs actively utilize digital platforms, while only 36% are willing to invest in digital transformation. This discrepancy highlights the lack of financial incentives and awareness among small business owners.

The survey findings indicate that businesses in Kazakhstan are generally satisfied with digital services, with a satisfaction rate of 58%. However, these positive sentiments are tempered by infrastructure limitations and insufficient training programs.

The data suggest that Kazakhstan is progressing in its adoption of digital tools for business growth, but there is still work to be done as the country builds a robust institutional and technological infrastructure. Long-term success hinges on enhancing digital skills, fostering innovation, and

ensuring universal access to digital technologies.

Through a combination of theoretical analysis and practical insights, the survey provides a comprehensive evaluation of the digital transformation in Kazakhstani businesses. The integration of digital technologies, coupled with educational initiatives, regulatory support, and investment, holds the key to driving sustainable and inclusive economic development.

### Conclusion

To summarize, the findings of this study suggest that the integration of digital technologies in Kazakhstan's business environment has been a crucial driver for the development of a modern, efficient, and competitive economic system.

The results of a comprehensive literature review, systematic analysis, comparative evaluation, and sociological survey indicate that digital transformation acts as a technological and institutional catalyst for change. Kazakhstan is taking initial steps towards digital advancement, with platforms like Kaspi.kz, eGov, and e-License streamlining business processes, enhancing transparency, and improving access to public services.

The study also reveals ongoing challenges, such as an uneven distribution of digital infrastructure across regions, a lack of digital literacy among the population, and insufficient preparedness for digital investments among small and medium-sized enterprises.

The central finding is that for Kazakhstan to achieve full digital readiness, there is a critical need to bolster human capital, augment financial and educational support for entrepreneurs, and foster a collaborative partnership between government and business in implementing digital initiatives.

The process of digital transformation must be viewed not merely as a technological advancement, but rather as a comprehensive socioeconomic transformation that stimulates innovation, enhances competitiveness, and promotes sustainable growth (Kaggwa S. et al., 2023:889).

The research emphasizes that the successful implementation of digital technologies is a crucial aspect in improving the quality of the business environment and positioning Kazakhstan as a regional leader in the realm of digital economics.

The study underscores that Kazakhstan's future digital evolution depends on its ability to seamlessly integrate advanced technologies such as artificial intelligence, big data analysis, and blockchain into its operations. The proactive adoption of these innovative technologies will not only boost operational effectiveness and streamline decision-making processes but also foster trust and credibility within the business community (Rakhmansyah M. et al., 2025:159).

In this context, the government's endeavors to enhance digital infrastructure, foster e-commerce development, and foster innovation-driven entrepreneurship are of utmost significance. The continued collaboration between educational institutions, businesses, and government officials will ensure that Kazakhstan's digital transformation remains accessible, adaptable, and aligned with global technological progress, ultimately bolstering its position in the global market.

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## **ҚАЗАҚСТАНДАҒЫ БИЗНЕС ОРТАНЫ ДАМУҒА ҮШІН ЦИФРЛЫҚ ҚҰРАЛДАРДЫ ҚОЛДАНУ ТӘЖІРИБЕСІ**

**Аңдатпа.** Бұл зерттеудің мақсаты цифрлық экономикаға көшу және инновациялық бизнес-ортаны құру контекстінде Қазақстанда бизнесті өсіру үшін цифрлық құралдарды пайдалануды зерттеу болып табылады. Бұл жұмыс уақытылы, өйткені цифрлық технологиялар ұлттық экономикалардың бәсекеге қабілеттілігін қамтамасыз ету және бизнесті жүргізу тиімділігін арттыру үшін маңызға ие болып келеді. Осы зерттеуді жүргізе отырып, біз дамушы нарықтардағы бизнес-ортаның цифрлық трансформациясын жақсырақ түсінуге және Қазақстанда цифрлық шешімдерді енгізудің ерекше ерекшеліктерін анықтауға өз үлесімізді

қосамыз деп үміттенеміз. Сонымен қатар, бұл зерттеу алғаш рет цифрлық құралдардың елдегі кәсіпкерлік пен инвестициялық тартымдылыққа әсерін жан-жақты талдайды. Бұл зерттеудің практикалық маңыздылығы оның нәтижелерін мемлекеттік органдар, бизнес иелері және инвесторлар пайдалана алады. Осы зерттеудің нәтижелерін қолдана отырып, олар цифрлық стратегияларды әзірлей алады, шағын және орта кәсіпорындарды (ШОБ) қолдау жүйелерін жетілдіре алады және инновациялық технологияларды енгізу тиімділігін арттыра алады. Зерттеу ғылыми әдебиеттерді талдауды, жүйелі және салыстырмалы әдістерді, аналитикалық әдістерді және бизнес иелерінің сауалнамаларын біріктіретін кешенді тәсілге негізделген. Бұл кешенді тәсіл бізге цифрлық ландшафттың қазіргі жағдайын бағалауға, оның эволюциялық тенденцияларын анықтауға және цифрландырудың іскерлік белсенділікке әсерін бағалауға мүмкіндік береді. Зерттеу көрсеткендей, Қазақстан цифрлық экономикаға көшудің берік негізін қалады. Бұған eGov, электрондық лицензиялау және т. б. қоса алғанда, әртүрлі цифрлық қызметтерді дамыту арқылы қол жеткізілді Kaspersky.kz. бұл қызметтер бизнес-операциялардың ашықтығын арттыруға, мемлекеттік органдармен өзара іс-қимылды жеңілдетуге және қаржылық операцияларды жеделдетуге бағытталған.

**Кілт сөздер:** Цифрлық трансформация, бизнес-орта, цифрлық құралдар, цифрлық экономика, электрондық үкімет, адами капитал, тұрақты даму.

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## **КАЗАХСТАНСКАЯ ПРАКТИКА ПРИМЕНЕНИЯ ЦИФРОВЫХ ИНСТРУМЕНТОВ ДЛЯ РАЗВИТИЯ БИЗНЕС-СРЕДЫ**

**Аннотация.** Целью данного исследования является изучение использования цифровых инструментов для роста бизнеса в Казахстане в контексте перехода к цифровой экономике и создания инновационной бизнес-среды. Эта работа является своевременной, поскольку цифровые технологии приобретают все большее значение для обеспечения конкурентоспособности национальных экономик и повышения эффективности ведения бизнеса. Проводя это исследование, мы надеемся внести свой вклад в лучшее понимание цифровой трансформации бизнес-среды на развивающихся рынках и выявить специфические особенности внедрения цифровых решений в Казахстане. Кроме того, в этом исследовании впервые будет проведен всесторонний анализ влияния цифровых инструментов на предпринимательство и инвестиционную привлекательность в стране. Практическая значимость этого исследования заключается в том, что его результаты могут быть использованы государственными учреждениями, владельцами бизнеса и инвесторами. Применяя результаты этого исследования, они могут разрабатывать цифровые стратегии, совершенствовать системы поддержки малых и средних предприятий (МСП) и повышать эффективность внедрения инновационных технологий. Исследование основано на комплексном подходе, который сочетает в себе анализ научной литературы, систематические и сравнительные методы, аналитические приемы и опросы владельцев бизнеса. Этот комплексный подход позволяет нам оценить текущее состояние цифрового ландшафта, выявить тенденции его эволюции и оценить влияние цифровизации на бизнес-активность. Исследование показывает, что Казахстан заложил прочную основу для перехода к цифровой экономике. Это было достигнуто благодаря развитию различных цифровых сервисов, включая eGov, электронное лицензирование и Kaspersky.kz. Эти сервисы направлены на повышение прозрачности бизнес-операций, упрощение взаимодействия с государственными органами и ускорение финансовых транзакций.

**Ключевые слова:** Цифровая трансформация, бизнес-среда, цифровые инструменты, цифровая экономика, электронное правительство, человеческий капитал, устойчивое развитие.

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