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COMPARATIVE ANALYSIS OF CITIZEN COMPLAINT  
HANDLING: KAZAKHSTAN FOREIGN COUNTRIES

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**Abstract.** The study is aims to develop scientifically based proposals for the modernization of the system for considering citizens' appeals in the Republic of Kazakhstan based on a comparative analysis of international experience in digital public administration. The purpose of the study is to determine organizational, legal and technological mechanisms that can increase the efficiency of processing appeals, transparency of procedures, and the level of citizens' confidence in state institutions in the context of digital transformation.

The analysis finds that successful models are based on the "only once" principle, unified digital identification, interagency data exchange, process standardization and the use of intelligent solutions. For Kazakhstan, measures have been proposed to further debureaucratize the system, including the introduction of a single mobile identifier, the development of a secure data exchange platform, the transition to proactive services for life scenarios, the integration of AI tools and increased transparency of access to personal data through the citizen's personal account. The implementation of these steps requires an update of the digital government strategy with clear KPIs and an architecture of intersystem compatibility.

**Keywords:** e-Government, public complaintsdigital government services, comparative study, Republic of Kazakhstan, public administration, digitalization.

**Аңдатпа.** Зерттеу цифрлық мемлекеттік басқарудың халықаралық тәжірибесін салыстырмалы талдау негізінде Қазақстан Республикасында азаматтардың өтініштерін қарау жүйесін жаңғырту жөніндегі ғылыми негізделген ұсыныстарды әзірлеуге бағытталған. Зерттеудің мақсаты өтініштерді өңдеудің тиімділігін, рәсімдердің ашықтығын және цифрлық трансформация жағдайында азаматтардың мемлекеттік институттарға сенімінің деңгейін арттыруға қабілетті ұйымдық-құқықтық және технологиялық тетіктерді айқындау болып табылады.

Талдау нәтижесінде табысты модельдер «only once», бірыңғай цифрлық сәйкестендіру, ведомствоаралық деректер алмасу, процестерді стандарттау және зияткерлік шешімдерді пайдалану қағидаттарына негізделетіні анықталды. Қазақстан үшін жүйені одан әрі бюрократияландыру бойынша шаралар ұсынылды, оның ішінде бірыңғай мобильді сәйкестендіргішті енгізу, деректермен алмасудың қорғалған платформасын дамыту, өмірлік сценарийлер бойынша белсенді қызметтерге көшу, AI-құралдарды интеграциялау және азаматтың жеке кабинеті арқылы дербес деректерге қолжетімділіктің ашықтығын арттыру. Бұл қадамдарды іске асыру нақты KPI және жүйеаралық үйлесімділік архитектурасы бар цифрлық үкімет стратегиясын жаңартуды талап етеді.

**Түйін сөздер:** е-үкімет, қоғамдық шағымдар, сандық үкімет қызметтері, салыстырмалы зерттеу, Қазақстан Республикасы, цифрландыру.

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**Аннотация.** Исследование направлено на разработку научно обоснованных предложений по модернизации системы рассмотрения обращений граждан в Республике Казахстан на основе сравнительного анализа международного опыта цифрового государственного управления. Целью исследования является определение организационно-правовых и технологических механизмов, способных повысить эффективность обработки обращений, прозрачность процедур и уровень доверия граждан к государственным институтам в условиях цифровой трансформации.

В результате анализа установлено, что успешные модели базируются на принципе «only once», единой цифровой идентификации, межведомственном обмене данными, стандартизации процессов и использовании интеллектуальных решений. Для Казахстана предложены меры по дальнейшей дебюрократизации системы, в том числе внедрение единого мобильного идентификатора, развитие защищённой платформы обмена данными, переход к проактивным услугам по жизненным сценариям, интеграция AI-инструментов и повышение прозрачности доступа к персональным данным через личный кабинет гражданина. Реализация данных шагов требует обновления стратегии цифрового правительства с чёткими KPI и архитектурой межсистемной совместимости.

**Ключевые слова:** e-Government, обращения граждан, цифровые государственные сервисы, сравнительное исследование, Республика Казахстан, государственное управление, цифровизация.

## Introduction

The study of successful foreign experience in overcoming barriers in the process of debureaucratization of public administration is of particular relevance for improving domestic practice. This study is devoted to the analysis of key approaches and achievements of Estonia, South Korea, Singapore, Canada, the USA and Australia in the debureaucratization of the process of considering citizens' appeals and their comparison with the situation and reforms in the Republic of Kazakhstan. The choice of these countries is due to their recognized successes in the field of e-government, innovations in the provision of public services and targeted policies to improve the efficiency of the state apparatus. The development of digital public administration in the 21st century is shaping a new paradigm of relations between the state and citizens, where citizens' appeals as the main channel of interaction, communication and feedback occupy a key place. In the context of the rapid digitalization of government institutions, the public's demand for transparency, efficiency and accountability becomes a systemic requirement for state structures. Today, citizens' appeals are turning into a tool for assessing the effectiveness of state bodies, an indicator of the level of trust and an indicator of the quality of public administration. The relevance of the research topic is due to the fact that the growth of online services and digital platforms imposes new requirements on the state not only in terms of technical accessibility and convenience, but also in the context of institutional accountability, transparency of the processes of consideration and participation of citizens in decision-making. In modern conditions, digital service of citizens goes far beyond the technical tool: it becomes a factor in the formation of confidence in the authorities, the development of civil society and improving the quality of democratic procedures. The effectiveness of the consideration of citizens' appeals is directly related to the perception by citizens of justice, responsibility and openness of state institutions.

At the international level, a steady trend is being formed for the introduction of intelligent systems, automation and integration of artificial intelligence in the processes of considering citizens' appeals. Countries such as Estonia, Singapore, South Korea, Canada, the USA and Australia demonstrate examples of the effective use of digital technologies to increase the efficiency, speed and quality of communication between society and the state. For Kazakhstan, which is actively developing the e-government ecosystem, the study and adaptation of international best practices is becoming critical to improve the efficiency of public services and strengthen citizens' trust in state institutions. The main scientific task of the study is to systematize and compare the international experience in considering citizens' appeals, identify the most effective organizational, legal and technological models, assess their applicability in Kazakhstan's conditions and determine the risks and restrictions when adapting them.

The purpose of the study is to develop scientifically based proposals for the modernization of Kazakhstan's system for considering citizens' appeals based on a comparative analysis of international experience and the introduction of advanced digital and intelligent solutions. The work is aimed at increasing citizens' confidence in the authorities and ensuring effective communication between the state and society in the context of digital transformation.

Within the study's analytical framework, the following research questions can be formulated:

- What are the key organizational, legal, and technological elements of the modernization of the system for considering citizens' appeals in Kazakhstan, according to which the results of

comparison with international experience make it possible to form recommendations for increasing confidence in the authorities and the effectiveness of communications in the context of digital transformation?

- What architectural solutions ensure an increase in speed, transparency and trust of citizens in public services in Kazakhstan, and what implementation steps should be taken taking into account local restrictions and regulatory conditions?

### **Literature Review**

Recent comparative and cross-national studies highlight the rapid development of digital government and its impact on public service delivery, transparency and accountability. Fundamental analyses such as Janssen, M., & van der Voort, Haiko G., as well as Takeoka, A., Christopher, C., & Reddick, G. highlight how digital government platforms and electronic ombudsman services shape citizen efficiency and satisfaction in different contexts. The Estonian e-Estonia model and its emphasis on digital identity and governance have been repeatedly cited as a benchmark for integrated electronic services by authors such as Kalja, A., Reitsakas, A., & Saard, N. Additional regional and organizational perspectives such as OECD, United Nations, World Bank reports provide estimated benchmarks of the digital government index, e-government surveys, and GovTech maturity indicators, that facilitate cross-country comparisons and track progress towards digitalization and governance transparency.

Much of the literature explores industry and country adaptations, including Singapore, Estonia, Korea, Canada, Australia and the United States, focusing on how digital channels facilitate citizen engagement, complaint management, and anti-corruption measures. Notable contributions include Cho, S., Hur, J.Y., Kim, D. on digital channels and life cycle management in Korea and cross-national research in *The Government Information quarterly*, which contextualizes e-services within a broader framework of governance. While global assessments such as the UN e-Government Survey, OECD e-Government Benchmark, World Bank E-Services Index provide high-level indicators and methodological comparability, several papers emphasize the need to adapt best practices to specific legal, country's infrastructure and cultural contexts in aligning digital governance initiatives with local structures to ensure effective citizen participation and accountability.

### **Materials and methods**

Methods include content analysis of regulatory acts and official sample documents, analysis of quantitative and qualitative indicators of digitalization in the Republic of Kazakhstan (2015-2025), comparative analysis of legal and institutional structures, Scopus and Web of Science literature reviews (2015-2025) on e-Government citizen services, ombudsmen and open data, analysis of public statistical materials on the speed of consideration of appeals, the share of online appeals and the level of trust of citizens. Key results show that the most important parameters of efficiency are a single digital infrastructure, a standard circulation life cycle and transparency of the processing stage, the presence of independent supervision and access to information significantly increases confidence in public services, the flexibility of the national legal framework and the focus on inclusiveness critically affect the quality of service.

### **Discussion and results**

In the Republic of Kazakhstan, digitalization of public administration was developing within the framework of the state program "Digital Kazakhstan" (2018-2022), the main goal of which was to form an effective, transparent service model of interaction between the state and citizens. The created digital platforms such as eGov.kz, e-Otinish and Ashyq provide online access to services, licensing, filing and monitoring of citizens' appeals.

This policy was continued in the Concept of Digital Transformation, the Development of the Information and Communication Technologies and Cybersecurity Industry for 2023-2029, which focuses on regulatory tools, unification of the regulatory framework, transparency and accountability measures, data privacy protection and the formation of a personnel reserve in the field of information security (Decree of the Government of the Republic of Kazakhstan, 2023). In this context, digital transformation maps of government agencies become a practical tool for implementing the concept: they systematize goals, projects and resources, record architectural layers of services and data,

registries and APIs, cybersecurity requirements, regulatory principles and audit measures, and also tie each initiative to specific KPIs and deadlines. Thus, maps turn into living road maps of the ecosystem of the digital state: they connect regulation and technical architecture with real services, allow measuring progress through transparent metrics, ensure risk management and infrastructure sustainability, and for citizens and businesses demonstrate transparency of processes and expected transformation effects (Maps of digital transformation, 2025). According to the report of the Ministry of Digital Development, Innovation and Aerospace Industry of the Republic of Kazakhstan for 2024, more than 13.2 million citizens actively use the eGov.kz portal, and the share of services provided in digital format has reached 94%. At the same time, despite the high level of digital coverage, the user satisfaction rate remains at 69%, which is lower than the average for OECD countries by 81% (Digital Kazakhstan, 2024).

However, it should be noted that more than 3 million citizens have mastered proactive services, and over 10.2 million applications have been submitted through the e-Otinish platform since 2021 (Ministry of Artificial Intelligence and Digital Development of the Republic of Kazakhstan, 2025).

As part of the UN global electronic power rating, Kazakhstan ranks 29, behind Denmark, South Korea and Estonia which occupy the first three positions. The UN rating is assessed by 193 states and is formed every two years, current data relate to estimates for 2020. According to the UN, Denmark, South Korea and Estonia remain the leaders in the development of e-government, occupying the corresponding 1-3 places. Among the CIS countries, Kazakhstan shows the best results and occupies a leading position in the region 1st place, followed by Russia 36, Belarus 40, Ukraine 69, Uzbekistan 87 and others. In the global context of the current year, Kazakhstan is steadily moving along the rating; over the past two years, it has risen 10 positions from last year.

The United Nations Global e-Government Development Ranking (EGDI) includes three constituent elements: Electronic Services Development (OSI), Human Capital Development (HCI), and Telecommunications Infrastructure (TII). Compared to 2018, EGDI in 2020 increased by 10.2%, online services by 6.38%, human capital by 5.6%, and the largest increase was recorded in the development of telecommunications infrastructure, which amounts to 22.7%. At the same time, Kazakhstan has reached an almost maximum score in terms of the level of electronic services 0.92 out of 1, which indicates a high degree of digitalization and consonance with international practice (UN E-Government Survey, 2020). Modern research in the field of digital maturity of public administration shows that a high level of digitalization of authorities directly correlates with the degree of reduction of bureaucratic procedures, transparency of decisions and citizens' trust in government institutions. In the countries leading digital development, sustainable methodological approaches to assessing maturity have formed, in which key attention is paid not only to technological, but also to the institutional and cultural aspects of digital transformation (Tangi et al., 2025).

Estonia is recognized as the benchmark of the digital state thanks to the X-Road ecosystem, which provides secure and automated data exchange between all state databases. This eliminates duplicate document requests and speeds up administrative processes. According to the OECD Digital Government Index, the level of satisfaction of Estonian citizens with digital services exceeds 90%, and the average processing time is less than 48 hours (UN E-Government Survey, 2024). In addition, modern digital government systems in different countries demonstrate that the availability and quality of services directly depend on how well the channels of interaction with citizens are built and how data management is organized. Studies show that key mechanisms for improving efficiency include: the creation of interoperable public portals, the introduction of standardized data transfer and user identification, user-oriented services and transparency of processes, as well as clear management and sustainable management of IT processes at the state level. These conclusions are supported by a comparative analysis of digital proposals in several countries and reflect a general pattern that digital channels work better where there is a single policy, a coordinated architectural solution, and responsible data organization (Rizk et al., 2025). Using the example of Estonia and neighboring countries, it can be observed that the integrated ecosystem of electronic services is strengthened due to the close connection between the data exchange infrastructure, for example, cross-level identification and a single registry, and a single point of access for citizens. This combination reduces the cost of finding services, speeds up the processing of requests, and increases confidence in public services [9]. In comparative cases, Korea, Canada, and Australia

demonstrate that efficiency increases when moving from fragmented portal solutions to a holistic architecture with support for analytics and feedback from users (Cho et al., 2025).

What this means for Kazakhstan and the regional context: It is useful for Kazakhstan to consider adapting elements of open and interconnected services within the existing digital infrastructure and legal framework. In particular, Estonia's experience in intersystem integration and unified authentication mechanisms can serve as a guideline for the development of a reliable identification infrastructure and interagency compatibility. At the same time, it is important to take into account local features and requirements for data protection in order to ensure a balance between openness and privacy of citizens (Kalja et al., 2005). Thus, it can be noted that interoperable portals and unified user identification are associated with a reduction in request processing time and an increase in citizens' satisfaction with services. User orientation and transparency of processes strengthen citizens' confidence in digital government services, which supports increased participation in electronic services and the adaptation of foreign models requires taking into account the national context and legal restrictions in the field of data protection, but the basic principles of service design and data management remain adoptable.

Singapore is implementing a national Smart Nation strategy in which the digital maturity of authorities is assessed based on the ability to use artificial intelligence and big data analytics to predict public inquiries and risks. According to the World Bank GovTech Maturity Index 2023, Singapore is included in the category of countries with the maximum level of maturity (World Bank, 2023). The main emphasis is on personalizing services and interdepartmental integration, which ensures proactive interaction between the state and the citizen.

South Korea is promoting the Government 3.0 concept, which focuses on integrating all services into the one-stop government model. This means that a citizen interacts with the state through a single digital window, and decisions are made on the basis of comprehensive analytics and interdepartmental data exchange. South Korea ranks first in the UN E-Government Development Index 2022, which confirms the effectiveness of a systematic approach to digital governance (OECD, 2023). Singapore is known for its pragmatic approach to public administration, its emphasis on meritocracy, and its focus on results. In the fight against the bureaucratization of the process of processing citizens' appeals, Singapore focused not only on technology but also on systemic quality management, standardization of processes and a proactive approach. Creating single access points, for example, SingPass, to a wide range of public services, allowing citizens to interact with the state through a single interface, and not contact each department separately. This reduces the complexity and multi-step procedures. Service Standards. Clear establishment and public declaration of quality standards and deadlines for the provision of public services, including consideration of appeals. Strict monitoring of compliance with these standards increases predictability and reduces uncertainty for citizens (UN E-Government Survey, 2024).

Proactive service delivery. Transition from a model where the citizen is the initiator of the appeal to a model where the state proactively provides services or requests the minimum necessary information based on available data and the life situations of citizens, for example, automatic assignment of benefits. Kazakhstan also strives to improve the quality of public services and introduces service standards, but the consistency of their application and the level of proactivity are still lower than in Singapore. The feedback system is functional, but its impact on actual process change may be limited. Singapore's experience is valuable for Kazakhstan in terms of introducing a culture of quality management in the public sector, developing clear and measurable standards, and moving to a more proactive model of interaction with citizens. South Korea is the world leader in Internet and mobile technology penetration, which has become the basis for building one of the most developed electronic governments. South Korea's experience in de-bureaucratization of the process of considering citizens' appeals is characterized by the scale of the introduction of digital solutions and a strong focus on user convenience (Febiri et al., 2024).

Highly developed digital infrastructure provides fast and reliable access to online services for the vast majority of the population. Integrated information systems make it possible to effectively exchange data between departments, speeding up the processing of applications and reducing the need for citizens to provide additional documents. Active development and widespread use of mobile applications to access government services and submit requests make interaction with the state as convenient and accessible as possible at any time and anywhere. State online resources and mobile

applications are developed taking into account the principles of convenience and an intuitive interface, which reduces the complexity of interaction and minimizes errors when filling out forms and submitting requests (Cho et al., 2025). In accordance with the Concept for the Development of Public Administration in the Republic of Kazakhstan until 2030, the transition from a «bureaucratic» model of relations between the state and society to a proactive, service and responsive form of government should become the main goal for state bodies. Thus, the population will have the opportunity to be heard and choose important decisions for themselves, which, in turn, will increase the level of trust in the state and form a «human-centered» state (Administrative Procedural Code of the Republic of Kazakhstan, 2020).

Kazakhstan is also actively developing digital infrastructure and mobile government services, but the level of their penetration and integration, as well as the degree of elaboration of user experience, may lag behind South Korean indicators. Kazakhstan faces the challenge of ensuring equal access to digital services in the regions and the need to improve the digital literacy of the population to fully use the potential of e-government in the fight against bureaucracy. The South Korean experience provides valuable lessons in scaling digital solutions, integrating systems in a large state apparatus, and the importance of investing in user experience to provide a real de-bureaucratic effect.

The US is a rich example of a mix of tiered public services and advanced private technology, where coordination among federal, state, and local entities affects service availability and quality. Studies show that key factors in the effectiveness of digital government in the US context include the introduction of user-oriented services and unified portals at the federal and state levels, ensuring transparency in the processing of appeals and open data to involve citizens, the use of consistent user identification and interagency data exchange, and the presence of sustainable mechanisms for managing IT processes and monitoring efficiency. These aspects are emphasized in comparative analyses of digital initiatives and in the study of the transition to digital channels of service for the population (Janssen & Haiko, 2016). Features of the American model include a federated structure: interoperability between federal agencies and states requires architecture adaptability and flexibility to ensure system interoperability and secure data exchange. Effective examples include modern portals that integrate citizen services, integrated identity management solutions, and enhanced privacy protection. In the context of Kazakhstan and neighboring regions, the US experience can be taken into account as a source of ideas for structuring the modeling of digital services and evaluating effectiveness, but adaptation must take into account unique legal frameworks and levels of the public sector (Janssen & Haiko, 2016). Thus, we can conclude that the effectiveness of digital service channels in a federal US system largely depends on the ability to integrate services through unified portals and a single identification mechanism, which reduces barriers for citizens and speeds up the processing of requests, and the transparency of processes and access to open data strengthen the trust of citizens and create conditions for the active participation of a demographically diverse population in digital services.

Canada demonstrates a well-developed public digital infrastructure, where interaction between federal institutions, provinces, and municipalities is implemented through agreed channels and uniform principles of citizen service. Research highlights that key drivers of digital government effectiveness in the Canadian context include the unification of user services through integrated portals and uniform identification mechanisms; ensuring transparency in the processing of requests and wide access to open data; sustainable data management mechanisms, including interagency agreements and strict confidentiality requirements; active citizen engagement through feedback and targeted pilots at the provincial level. Canadian Model Features: regional decentralization requires adaptive architecture design and interagency collaboration. Canada has several layers of services that require coordination between federal programs, for example, data migration, digital identification, and provincial services, which sometimes complicates uniformity but provides flexibility to meet regional needs. Studies show that the success of digital services in Canada is associated with a developed ecosystem of open data, a strong legal framework for the protection of personal information, and active involvement of citizens through digital channels and mobile services (Janssen & Haiko, 2016).

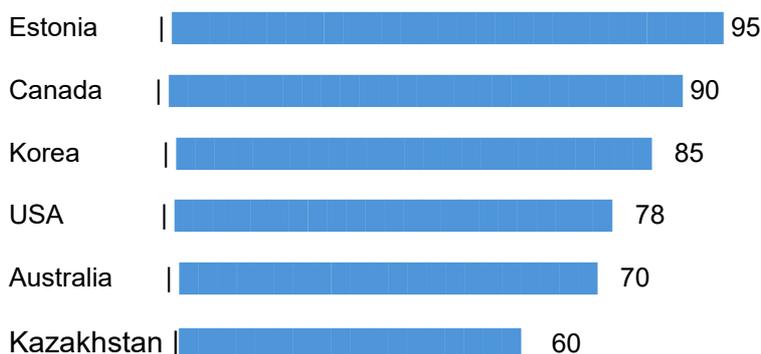
Fit to Kazakh context Canadian expertise can be useful in digital identification design, inter-agency data sharing and open data. However, adopting Canadian practices requires taking into

account the federal structure and regional differences in Kazakhstan. In particular, a verified central coordination and legal framework is needed for interregional data exchange, system compatibility and uniform standards of public service (Janssen & Haiko, 2016).

Australia demonstrates the sustainable deployment of digital services at the federal and provincial levels, while emphasizing the importance of uniform principles of service to citizens, transparency of processes and interagency data exchange. The studies highlight the following key drivers of digital government effectiveness in the Australian context of integrated portals and single identity to facilitate access to services; openness of data and transparency of processing of appeals, stimulating civic participation and trust; strong data management mechanisms and interagency agreements that ensure system interoperability; active inclusion of citizens in feedback cycles and pilot projects at the state and territory levels. Features of the Australian model are that a federated structure requires coordination between federal agencies and states/territories, which requires architecture flexibility and agreed standards. Australia has developed unified service channels, including digital portals, digital identification, and integration of services through national initiatives, which helps to reduce bureaucratic barriers and speed up the processing of requests (Takeoka et al., 2017). Open data and process transparency in the Australian system support citizen trust and encourages participation through engagement with the private sector and civil society (Kalja et al., 2005).

Fit to Kazakh context Australian expertise is useful for designing a tiered digital infrastructure where unified identification and inter-agency data sharing can increase service availability and reduce processing time. It is important to adapt the principles to the national legal system and the peculiarities of public administration of Kazakhstan, while maintaining flexibility and the ability to scale decisions at the regional level (Janssen & Haiko, 2016; Takeoka et al., 2017).

**Graphic 1.** Digital government level by country 2024 (Index 0-100)



*Sources: aggregated index 0-100 obtained through normalization and aggregation of baseline indicators; data relevant for 2024; possible differences in index update periods (OECD e-Government Benchmark, 2024).*

This study provides an aggregated estimate of digital government levels for six countries for 2024: Estonia, Canada, Korea, USA, Australia, and Kazakhstan. To form a single comparable index, a normalized aggregated metric of the range from 0 to 100 was used, which integrates the results of several input indices: e-Government Benchmark, Digital Government Index, World Bank eServices Index, and UN e-Government Survey. In visual format, the horizontal bar chart provides a visual comparison of the levels of digital maturity of states, allowing readers to quickly assess the relative position of each country in the frame of selected sources.

Key conclusions indicate the clear leadership of Estonia, which demonstrates an approximate value of about 95 points. This result is probably due to the widespread introduction of unified digital services, deep digital identification, and effective integration of public services, which ensures high availability and convenience of user interaction with electronic public services. An important feature is the significant gap between the leader and the rest of the countries: Canada and Korea occupy the nearest positions with estimates of approximately 90 and 85, respectively, which reflects a stable digital infrastructure, a high level of online provision of public services, and effective digital policies in these countries. Kazakhstan, despite a positive trajectory in recent years, remains at a lower level,

about 60 points, which may be due to the limited scale of digital integration, uneven access to digital services in rural areas, or the need to further modernize government services.

**Table 1. Digital practices of public services in Kazakhstan and other countries**

Criterion/ Country	Kazakhstan	Estonia	Singapore	South Korea	USA	Canada	Australia
Single digital identification	Basic solutions in development; state identification system within portals, increased integration with public services	X-Road infrastructure + digital identification via digital ID; unified service access system	SingPass and digital identification for public services; single sign-on to government portals	Single sign-on for online services	Diverse regional/federal approaches; there are several identification systems	Developed national identification infrastructure; single sign-on across multiple portals	Unified digital identification within the portals of public services; integration with services
Communication architecture	Data exchange between departments is developing; open API principles, but the degree of integration varies	Advanced data exchange infrastructure interagency services	modern architecture; open APIs and data exchange between services	advanced and centralized architecture; national services	variable by state/federal; multiple layers used	modern data exchange architecture; single platform	modern architecture, open APIs, interagency exchange
Open data and transparency	initiatives are developing, but coverage and availability vary by sector	high openness: open data portals; regulatory support	high transparency; open data via govt datasets	high transparency within national projects	variable availability, but there is open data at the federal level	high transparency: open data and publishing	high transparency and open data
Personalization	limited personalization in most services; gradual implementation	significant personalization through service portals	personalized services through single sign-on	personalization within different services	moderate/different by department	active personalization and recommendations in services	personalization within portals and services
Transparency of requests for personal data	increasing transparency; data access policies	high transparency in terms of data access	transparency of data requests through open ledgers	high transparency, data usage reports	variable transparency across departments	high transparency of data queries	high transparency of data queries
AI analytics and chatbots	initial pilots; limited integration	chatbots and analytics are being actively introduced	AI analytics and chatbots are actively used	AI services and chatbots are being actively introduced	developed in individual departments	AI services and chatbots are widely used	active implementations of AI analytics and chatbots

Source: compiled by the authors

**Conclusions and recommendations**

The present study offers a comprehensive comparison of the level of digital government in seven countries Kazakhstan, Estonia, Singapore, South Korea, USA, Canada, and Australia based on the synergy of data from several international indicators: OECD e-Government Benchmark, Digital Government Index, World Bank e-Services Index and UN e-Government Survey. Two independent data sets, transformed into a single frame of criteria, made it possible to identify general trends, differences and practices that are most promising for the further development of digital public services.

Estonia's leadership is determined by a sustainable digital identification strategy, a single entrance to public services and interdepartmental data exchange through an infrastructure similar to X-Road. This indicates a high digital maturity and user orientation of government services. In countries with developed infrastructure, such as Canada, USA, South Korea, and Australia, there are high rates of open data and transparency, but variability in the degree of integration of services and personalization, which indicates the need for a uniform architectural basis and more systematic coordination of projects. Thus, an analysis of experience in de-bureaucratization of processing appeals of citizens of the above countries revealed successful reforms related to the digitalization of public services, the introduction of the principle of «only once» the standardization of processes, the creation of integrated platforms and feedback. These reforms focus on proactive services, the rejection of paperwork, the introduction of digital identification and the use of big data analysis. The main emphasis was on improving the user experience, increasing the speed, transparency and predictability of the state's response, eliminating the need for a personal visit to the authorities.

The development of the system for considering citizens' appeals in Kazakhstan in recent years has gone through the stages of institutionalization and digitalization: from the creation of a regulatory framework and regulations to the launch of an e-government infrastructure. The key achievements were the adoption of the Administrative Procedural Code, the unification of deadlines and procedures, as well as the emergence of digital services such as the eGov portal, the e-Otinish system and mobile applications. This allowed Kazakhstan to move from paper workflow to a proactive and digital model of interaction. However, unresolved issues remain.

Based on the analysis of international experience and the current Kazakhstan system, the following recommendations were proposed for further debureaucratization and digitalization of work with citizens' appeals:

- create a single mobile identifier (following the example of Singpass or Digital One-Pass), integrated with biometrics, to access all public services.
- ensure data exchange between departments through a secure digital platform.
- develop the concept of «life scenarios» for proactive service delivery depending on life events.
- integrate AI chat bots for initial processing of applications, text analysis and identification of common problems in order to increase the efficiency and quality of responses.
- create a personal account, which displays information about the requests of departments to the personal data of citizens, which will strengthen confidence in digital services.

In addition, it is proposed to develop or update a national digital government strategy with a clear vision, roadmap and KPIs focused on improving user experience and service availability; ensuring mutual compatibility between the portal of public services and regional services. An important element is the creation of an API gateway and access control regulations; the introduction of data access transparency regulations and service usage metrics.

## References

Decree of the Government of the Republic of Kazakhstan № 269. (2023 March 28). «On approval of the Concept of digital transformation, development of the industry of information and communication technologies and cybersecurity for 2023 - 2029».

Maps of digital transformation of state bodies of the Republic of Kazakhstan (2025).

Report on the implementation of the state program «Digital Kazakhstan» for 2024. (2024). Ministry of Digital Development, Innovation and Aerospace Industry of the Republic of Kazakhstan. <https://digit.gov.kz/ru/news/otchet-cifrovoy-kazahstan-2024> (accessed: 5 December 2025).

- Ministry of Artificial Intelligence and Digital Development of the Republic of Kazakhstan. (2025). <https://www.gov.kz/memleket/entities/maidd/press/news/details/969823> (accessed: 7 December 2025).
- United Nations E-Government Survey. (2020). Digital Government in the Decade of Action for. (2020) [https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2020-Survey/2020%20UN%20E-Government%20Survey%20\(Full%20Report\).pdf](https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2020-Survey/2020%20UN%20E-Government%20Survey%20(Full%20Report).pdf) (accessed: 9 December 2025).
- Tangi, L., Müller, P.R., Janssen, M. (2025). AI-augmented government transformation: Organisational transformation and the sociotechnical implications of artificial intelligence in public administrations. *Government Information Quarterly*, 42(3).
- United Nations E-Government Survey. (2024). Kazakhstan and Global Data. United Nations. <https://publicadministration.un.org/egovkb/en-us/> (accessed: 13 December 2025).
- Rizk A., Lindgren, I. (2025). Automated decision-making in public administration: Changing the decision space between public officials and citizens. *Government Information Quarterly*, 42(3).
- Kalja, A., Reitsakas, A., Saard, N. (2005). E-Government in Estonia: Best Practices. Tortland International Conference on Management of Engineering and Technology, 500–506.
- Cho, S., Hur, J.-Y., Kim, D. (2025). Bridging trust in AI and its adoption: The role of organizational support in AI chatbot implementation in Korean government agencies. *Government Information Quarterly*, 42(4).
- Janssen, M., Haiko, G. (2016). Digital government and public service delivery: Adaptive governance: Towards a stable, accountable and responsive government. *Government Information Quarterly*, 33(1), 1–5.
- World Bank. (2023). GovTech Maturity Index Report: Enhancing Digital Governance in Public Sector. <https://publicadministration.un.org/egovkb/en-us> (accessed: 15 December 2025).
- OECD. (2023). Digital Government Index 2023. <https://www.oecd.org/gov/digital-government-index.htm> (accessed: 17 December 2025).
- Febiri, F., Gariba, M.-I., Miloslav, H. (2024). The synergy between human factors, public digitalization and public administration in the European context. *Government Information Quarterly*, 10(4).
- Administrative Procedural Code of the Republic of Kazakhstan. (2020 June 29).
- Takeoka, A., Christopher, C., Reddick, G. (2017). A longitudinal cross-sector analysis of open data portal service capability: The case of Australian local governments. *Government Information Quarterly*, 34(2), 231–243.
- OECD e-Government Benchmark. (2024). <https://www.oecd.org> (accessed: 18 December 2025).
- World Bank eServices Index. <https://www.worldbank.org/> (accessed: 21 December 2025).
- The official e-government portal of the Republic of Kazakhstan. (2024). Statistics on the use of electronic services for 2024. <https://egov.kz/cms/ru/news/egov2024-statistics> (accessed: 25 December 2025).
- e-Otinish platform. System for filing and monitoring citizens' appeals. <https://eotinish.kz/> (accessed: 29 December 2025).

## АЗАМАТТАРДЫҢ ШАҒЫМДАРЫН ҚАРАУДЫ САЛЫСТЫРМАЛЫ ТАЛДАУ: ҚАЗАҚСТАН ЖӘНЕ ШЕТ ЕЛДЕР

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## СРАВНИТЕЛЬНЫЙ АНАЛИЗ РАССМОТРЕНИЯ ОБРАЩЕНИЙ ГРАЖДАН: КАЗАХСТАН И ЗАРУБЕЖНЫЕ СТРАНЫ

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