



Abstract

This article analyzes the legal regulation of citizens' interaction with public authorities in the context of electronic government from constitutional, administrative, information law, and comparative legal perspectives. It examines electronic government as a comprehensive legal institution ensuring transparency, accessibility of public services, protection of citizens' digital rights, administrative accountability, and effective digital governance. The study also identifies existing legislative challenges and proposes directions for improving the legal framework governing electronic interaction between citizens and public authorities.

Keywords: electronic government, digital governance, citizens' rights, public authorities, administrative law, digital public services, electronic interaction, legal regulation, interoperability, cybersecurity

Аннотация

В статье анализируется правовое регулирование взаимодействия граждан с органами публичной власти в условиях электронного правительства с позиций конституционного, административного, информационного и сравнительного права. Электронное правительство рассматривается как комплексный правовой институт, обеспечивающий прозрачность, доступность государственных услуг, защиту цифровых прав граждан, административную подотчётность и эффективное цифровое управление. В исследовании также выявляются существующие проблемы законодательства и предлагаются направления совершенствования правовой основы, регулирующей электронное взаимодействие между гражданами и органами публичной власти.

Ключевые слова: электронное правительство, цифровое управление, права граждан, органы публичной власти, административное право, цифровые государственные услуги, электронное взаимодействие, правовое регулирование, interoperability, кибербезопасность.

INTRODUCTION

The accelerated development of information and communication technologies has transformed the traditional paradigm of public administration, fundamentally changing the legal relationship between citizens and public authorities. Electronic government has become one of the principal instruments for ensuring transparency, efficiency, accountability, accessibility of public services, and citizen participation in governmental decision-making. Consequently, the modernization of public administration is no longer limited to the introduction of digital technologies but increasingly depends on establishing a comprehensive legal framework capable of regulating digital interactions between individuals and state institutions.

The transition from conventional administrative governance to electronic government represents a qualitative transformation in administrative law. Contemporary public administration increasingly relies upon electronic administrative procedures, digital identification systems, interoperable government databases, electronic document circulation, online administrative appeals, and integrated public service platforms. These developments require legislators to reconsider traditional legal institutions governing administrative procedures, legal certainty, procedural fairness, and protection of citizens' constitutional rights in the digital environment.

In recent years, the Republic of Uzbekistan has identified digital transformation as one of the strategic priorities of public administration reform. Within the framework of the "Digital Uzbekistan – 2030" Strategy, extensive institutional reforms have been implemented to digitalize state services, introduce integrated information systems, expand electronic public service platforms, and improve administrative efficiency [1]. The establishment of the Unified Portal of Interactive Public Services (my.gov.uz), electronic licensing mechanisms, digital identification systems, and interdepartmental electronic information exchange has significantly increased citizens' access to governmental services while reducing administrative burdens [2].

From a constitutional perspective, electronic interaction between citizens and public authorities directly concerns the realization of fundamental rights, including the right to information, the right to good administration, protection of personal data, access to justice, equality before the law, and protection of privacy. Accordingly, legal regulation of e-government should not merely facilitate administrative efficiency but must equally ensure constitutional guarantees and effective judicial protection against unlawful administrative actions conducted through digital platforms.

International organizations have increasingly emphasized that successful electronic government depends not only upon technological infrastructure but also upon the establishment of coherent legal institutions. OECD recommendations [3], United Nations E-Government Development Reports [4], and the European Union's digital governance framework consistently recognize that digital public administration requires comprehensive legislation governing interoperability, administrative transparency, cybersecurity, artificial intelligence, electronic identification, and citizens' digital participation [5].

Academic literature similarly demonstrates that electronic government constitutes an interdisciplinary legal institution situated at the intersection of constitutional law, administrative law, information law, cybersecurity regulation, and digital human rights. T. Janowski conceptualizes the evolution of digital government as a gradual transition from digitization and institutional transformation to citizen engagement and contextualized governance. He argues that sustainable digital transformation requires digital institutions to be adapted to the legal, administrative, and social context in which they operate [6]. Similarly, F. Bannister and R. Connolly maintain that technology-driven public-sector transformation should not be assessed solely in terms of efficiency or service delivery. In their view, electronic government must also preserve fundamental public values, including transparency, accountability, equality, responsiveness, and public trust [7]. These scholarly approaches demonstrate that legal certainty, procedural accountability, the protection of public values, and citizen-centered governance are essential prerequisites for sustainable digital transformation.

METHODOLOGY

This study employs a combination of formal legal, systematic legal, comparative legal, and analytical research methods to examine the legal regulation of citizens' interaction with public authorities within the framework of electronic government. Considering that electronic governance constitutes a multidisciplinary legal institution encompassing constitutional law, administrative law, information law, digital governance, and cybersecurity regulation, the research methodology is designed to evaluate both the normative foundations and the practical implementation of digital public administration.

The formal legal method was applied to analyze the constitutional provisions, legislative acts, presidential decrees, and subordinate legal instruments regulating electronic government and digital public services in the Republic of Uzbekistan. Particular attention was devoted to the Constitution of the Republic of Uzbekistan [9], the Laws "On Electronic Government" [10], "On Personal Data" [11], "On Electronic Document Management", "On Electronic Digital Signature" [12], "On Cybersecurity" [13] and the Law "On Administrative Procedures" [14]. The doctrinal interpretation of these legal acts made it possible to determine the legal status of citizens participating in digital administrative relations, the competence of public authorities providing electronic services, and the procedural guarantees ensuring the legality of electronic administrative decision-making.

The systematic legal approach enabled the examination of electronic government not merely as a technological platform for delivering public services but as an integrated legal mechanism composed of interconnected constitutional principles, administrative procedures, digital identification systems, interoperable government information resources, cybersecurity institutions, electronic document circulation, and judicial review mechanisms. This approach facilitated the identification of structural relationships between various legal institutions governing digital public administration and demonstrated how these institutions collectively influence the realization of citizens' constitutional rights within electronic governance.

A comparative legal analysis was conducted to evaluate Uzbekistan's legal framework alongside international and foreign legal models regulating electronic government. The comparative study primarily examined the European Union's regulatory framework concerning electronic identification and trust services (eIDAS Regulation) [15], the General Data Protection Regulation (GDPR) [16], OECD Recommendations on Digital Government Strategies [17], the United Nations E-Government Survey [18], and relevant legislation adopted by Estonia, Singapore, and the Republic of Korea, which are internationally recognized as leading digital governments [19]. This comparison allowed the identification of legislative approaches capable of enhancing administrative transparency, interoperability, procedural fairness, and legal certainty within Uzbekistan's digital governance system.

Furthermore, the research adopted an analytical method to examine academic literature published in peer-reviewed journals indexed in Scopus and Web of Science, as well as publications issued by international organizations specializing in digital governance and public administration reform. The analysis focused on scholarly discussions concerning administrative digitalization, legal accountability of public authorities, digital constitutionalism, protection of personal data, artificial intelligence in public administration, electronic administrative procedures, and citizens' digital rights [20–25].

The empirical foundation of this research also incorporates publicly available statistical reports published by the United Nations, the World Bank [26], the OECD, the Ministry of Digital Technologies of the Republic of Uzbekistan [27], and the Agency for the Development of Public Services [28]. These materials were analyzed to evaluate the current level of electronic public service delivery, digital accessibility, institutional interoperability, and citizen participation in electronic governance [29].

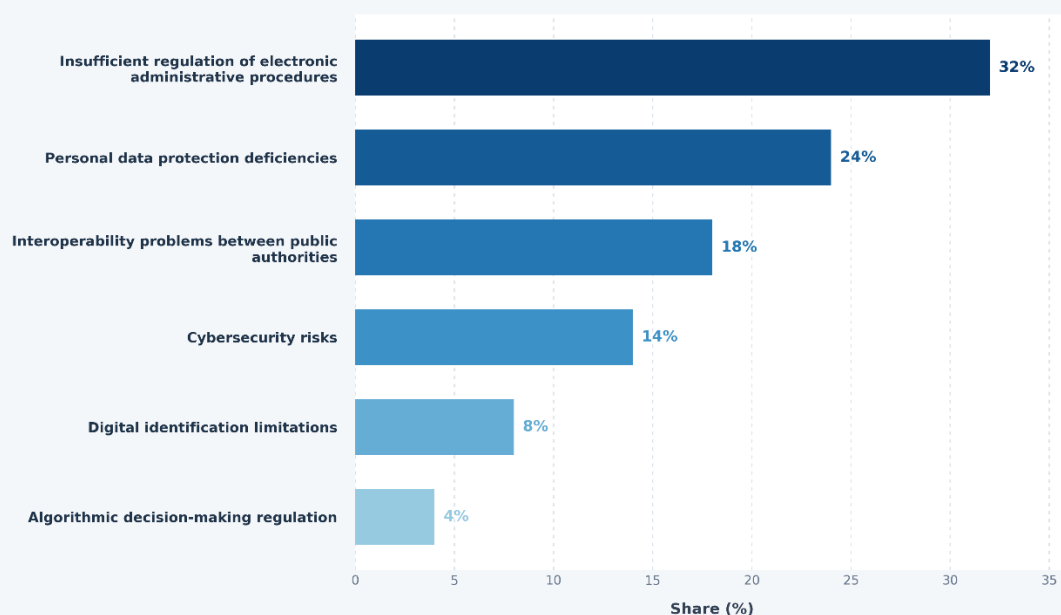
RESULTS

The findings demonstrate that the legal regulation of citizens' interaction with public authorities under electronic government is based on an integrated legal framework consisting of constitutional guarantees, administrative procedural legislation, information law, cybersecurity regulation, electronic identification, and digital public service mechanisms. Nevertheless, despite significant progress in the digital transformation of public administration, several legislative and institutional deficiencies continue to hinder the effective realization of citizens' digital rights and the delivery of citizen-centered public services. To identify the principal legal challenges affecting electronic interaction between citizens and public authorities, the present study systematized the most frequently discussed regulatory problems in national legislation, international reports, and comparative legal studies.

FIGURE 1

Main Legal Challenges in Electronic Government Regulation (%)

Distribution of the principal legal and institutional challenges



Source: Developed by the author based on the comparative analysis of national legislation, international reports, and academic literature [3–8, 15–26]

As illustrated in **Figure 1**, insufficient regulation of electronic administrative procedures represents the most significant legal challenge, accounting for approximately **32%** of the identified regulatory deficiencies. Existing legislation primarily establishes general administrative principles but does not comprehensively regulate electronic administrative acts, digital notification procedures, automated administrative decision-making, or procedural safeguards available to citizens in digital administrative proceedings [6]. The second most significant challenge concerns personal data protection (**24%**), reflecting the growing importance of privacy, information security, and institutional accountability in electronic

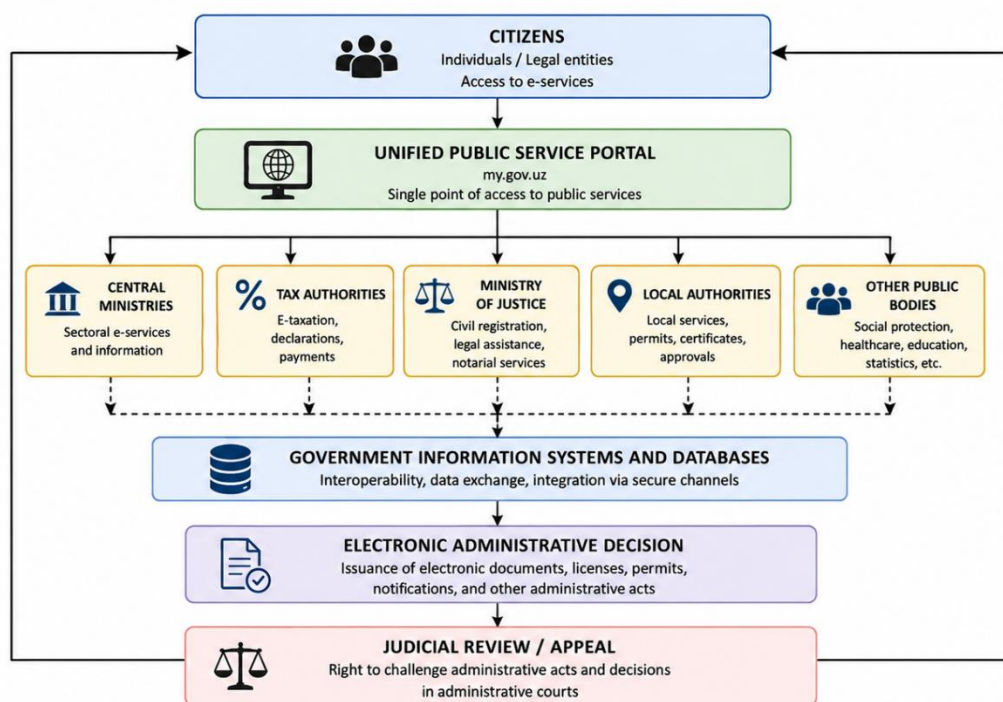
government systems. Interoperability among governmental information systems (**18%**) also remains a substantial obstacle, limiting administrative efficiency and increasing legal uncertainty regarding institutional responsibility for information exchange.

Table 1. Principal legal challenges affecting citizens' interaction with public authorities under electronic government

Legal challenge	Existing legal regulation	Identified legal gap
Electronic administrative procedures	General administrative legislation	Lack of detailed procedural standards for electronic administrative acts
Digital identification	Electronic Digital Signature legislation	Limited regulation of integrated digital identity mechanisms
Personal data protection	Law "On Personal Data"	Insufficient regulation of breach notification and compensation
Interoperability	Law "On Electronic Government"	Fragmented institutional coordination
Automated administrative decisions	Partially regulated	Lack of explainability and transparency requirements
Judicial protection	Constitutional guarantees	Limited procedural review of automated decisions

Source: Compiled by the author based on national legislation, the GDPR, and relevant scholarly literature [9–14, 16, 20–22].

The comparative legal analysis demonstrates that although Uzbekistan possesses a relatively comprehensive legislative framework governing electronic government, many regulatory provisions remain fragmented across different legal acts. Consequently, procedural guarantees available to citizens vary depending on the administrative authority responsible for delivering electronic public services.

Figure 2. Institutional Model of Citizens' Interaction with Public Authorities under Electronic Government

Source: Developed by the author based on the Laws of the Republic of Uzbekistan “On Electronic Government” and “On Administrative Procedures” [10, 14].

Figure 2 illustrates the institutional architecture of electronic government in Uzbekistan. The Unified Public Service Portal functions as the central interface connecting citizens with various governmental institutions. Although this architecture significantly enhances administrative accessibility and service efficiency, the research indicates that clearer legal regulation governing interagency information exchange, administrative responsibility, and procedural safeguards is necessary to ensure effective realization of citizens' constitutional rights.

DISCUSSION

The findings of this study demonstrate that the legal regulation of citizens' interaction with public authorities within the framework of electronic government has undergone substantial institutional development in the Republic of Uzbekistan. Nevertheless, the rapid digitalization of public administration has simultaneously generated new legal challenges that cannot be effectively addressed solely through the existing administrative and information legislation. The research confirms that the effectiveness of electronic government depends not only on technological modernization but also on the establishment of a coherent legal system capable of guaranteeing procedural fairness, legal certainty, accountability, and effective protection of citizens' digital rights.

The results obtained in this research are consistent with the conclusions reached by the Organisation for Economic Co-operation and Development (OECD) regarding digital government transformation. According to the OECD, successful electronic government requires a transition from service digitalization toward integrated digital governance based on interoperability, transparency, citizen participation, and institutional accountability [17]. Similarly, the present study demonstrates that Uzbekistan has already established important

institutional foundations for electronic government; however, fragmented legal regulation of administrative procedures and insufficient coordination among public authorities continue to reduce the effectiveness of digital public administration.

The comparative analysis also supports the conclusions presented in the United Nations E-Government Survey, which emphasizes that the quality of electronic government should be evaluated not only by the number of online services but also by the legal guarantees protecting citizens throughout digital administrative procedures [18]. The findings of this study likewise indicate that electronic interaction between citizens and public authorities should be regarded as a constitutional legal relationship in which administrative efficiency must always be balanced with the protection of individual rights, procedural justice, and judicial oversight.

The European Union's regulatory framework provides additional confirmation of the present findings. The General Data Protection Regulation (GDPR) and the eIDAS Regulation establish comprehensive legal mechanisms governing electronic identification, digital authentication, interoperability, data protection, transparency, and accountability of public institutions [15–16]. Unlike many developing digital governance systems, these regulations clearly define the legal responsibilities of public authorities concerning automated processing of personal data, electronic administrative decisions, cybersecurity incidents, and citizens' procedural rights. The present research similarly demonstrates that the incorporation of comparable legal guarantees into Uzbekistan's administrative legislation would significantly strengthen citizens' confidence in electronic government while improving institutional accountability.

Another important finding concerns automated administrative decision-making. The increasing integration of artificial intelligence, algorithmic risk assessment, and automated processing into public administration introduces legal questions that remain insufficiently regulated in many jurisdictions. Michael Veale and Irina Brass demonstrate that machine-learning systems used at the macro, institutional, and street levels of public administration are not merely neutral technical instruments; they reshape administrative processes and may produce value-laden and political consequences, thereby requiring adequate institutional capacity and accountability mechanisms [20]. Danielle Keats Citron's theory of "technological due process" further shows that automated systems may blur the distinction between rulemaking and individual adjudication while failing to provide traditional procedural safeguards, including meaningful notice, an opportunity to be heard, and reasoned decision-making. She therefore proposes mechanisms aimed at ensuring the transparency, accountability, and accuracy of automated administrative systems [21]. Similarly, Thomas Wischmeyer and Timo Rademacher regard artificial intelligence regulation as a system-wide legal issue, emphasizing that the complexity and opacity of algorithmic systems may make it difficult to determine whether they operate in accordance with the law and therefore require a comprehensive regulatory framework [22]. Viewed against these scholarly approaches, the present analysis indicates that Uzbek legislation does not yet comprehensively regulate automated administrative decision-making, particularly citizens' rights to obtain reasons, challenge algorithm-based decisions, request meaningful human review, and seek specific remedies for errors caused by digital systems. Accordingly, administrative procedural legislation should expressly subject automated decisions to the principles of legality, transparency, explainability, proportionality, human oversight, and judicial review.

An equally important issue identified during the research concerns the protection of citizens' personal data. Digital interaction with public authorities inevitably requires continuous processing of sensitive personal information, including biometric identifiers, financial records, health information, and civil registration data. Although Uzbekistan has established a legislative framework governing personal data protection [11], the study reveals that several internationally recognized legal guarantees remain absent or insufficiently developed. In particular, national legislation does not comprehensively regulate mandatory notification of personal data breaches, administrative sanctions specifically applicable to unlawful governmental processing of personal information, or effective compensation mechanisms available to individuals whose digital rights have been violated. These findings correspond with recent international scholarship emphasizing that trust in electronic government largely depends upon effective legal protection of personal data and institutional transparency [24].

The results additionally indicate that cybersecurity should no longer be considered exclusively a technical issue but rather an integral component of administrative legality. As electronic government increasingly relies upon interconnected digital infrastructure, cyber incidents may directly interfere with citizens' constitutional rights, including access to administrative services, social protection, healthcare, taxation, and judicial remedies. Consequently, cybersecurity legislation should establish detailed legal procedures governing continuity of public administration during cyber incidents, mandatory notification obligations toward affected citizens, institutional crisis management, and administrative liability arising from failures to protect digital public services [13].

CONCLUSION

The results of this study demonstrate that the legal regulation of citizens' interaction with public authorities in the context of electronic government has become one of the fundamental directions of contemporary public administration reform. The digital transformation of governmental functions has significantly expanded citizens' access to administrative services, increased institutional transparency, improved administrative efficiency, and strengthened opportunities for public participation in governance. Nevertheless, the research indicates that technological modernization alone cannot ensure the effectiveness of electronic government unless it is accompanied by a coherent and comprehensive legal framework capable of protecting constitutional rights within the digital environment.

The analysis confirms that the Republic of Uzbekistan has established a substantial legislative foundation regulating electronic government through constitutional provisions, administrative legislation, information law, personal data protection legislation, cybersecurity regulation, and electronic document management laws. However, the existing legal framework remains primarily oriented toward the technical organization of electronic public services rather than the comprehensive regulation of digital administrative legal relations. As a result, several essential legal issues – including electronic administrative procedures, algorithmic decision-making, interoperability, digital identity management, institutional accountability, cybersecurity responsibilities, and procedural guarantees for citizens – remain either insufficiently regulated or fragmented across different legislative acts.

Comparative legal analysis further demonstrates that leading digital governments have increasingly shifted their regulatory approaches from simple digitalization of administrative

services toward rights-based digital governance models. International legal instruments, including the General Data Protection Regulation (GDPR), the eIDAS Regulation, OECD Digital Government Recommendations, and United Nations digital governance standards, emphasize that electronic government should simultaneously ensure administrative efficiency, legal certainty, transparency, accountability, interoperability, protection of personal data, and effective judicial remedies. These principles provide valuable guidance for the further modernization of Uzbekistan's digital governance legislation.

Based on the findings of this study, it may be concluded that the long-term sustainability of electronic government depends upon the establishment of a citizen-oriented legal system capable of balancing technological innovation with the effective protection of fundamental rights. Electronic government should therefore be understood not merely as a technological platform for delivering public services but as a comprehensive constitutional and administrative legal institution that guarantees transparency, accountability, accessibility, procedural fairness, and the rule of law within the digital state.

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