

ECONOSCITECH INTEGRATION

ISSUE
7

INTERNATIONAL SCIENTIFIC
ELECTRONIC JOURNAL



**TASHKENT STATE
UNIVERSITY OF ECONOMICS**



**American University
of Technology**

Powered by Arizona State University®

ISSN: 3060-5075



Acceptance of articles

PUBLISHED EVERY MONTHLY



ARTICLE CONTRIBUTORS

**PROFESSORS-TEACHERS, SPECIALISTS
AND SCIENTIFIC RESEARCHERS.**



Google
Scholar

**Academic
Resource
Index**
ResearchBib

BASE

OpenAIRE

doi
Digital
Object
Identifier

OPEN ACCESS

CONTACT:



+998 94 3540880



<https://econoscitech-integration-journal.uz>



2026

**EDITOR-IN-CHIEF:**

Zufarova Nozima Gulamiddinovna
DSc., Dean of Tourism Faculty, TSUE

DEPUTY EDITOR-IN-CHIEF:

Makhmudov Nosir Makhmudovich
DSc., Prof., Academician

DEPUTY EDITOR-IN-CHIEF:

Suyunov Dilmurod Xolmurodovich
Doctor of Economics (DSc), Professor,

DEPUTY EDITOR-IN-CHIEF:

Allayarov Shamsiddin Amanullayevich
doctor of economics (DSC), professor

RESPONSIBLE SECRETARY:

Otaboyev Axmed Maxsudbek o'g'li
TSUE independent researcher

THE SCIENTIFIC-POPULAR
ELECTRONIC JOURNAL
"ECONOSCITECH-INTEGRATION"
HAS BEEN REGISTERED UNDER
THE NUMBER C-5669651 BY THE
AGENCY FOR INFORMATION AND
MASS COMMUNICATIONS (AOKA)
OF THE REPUBLIC OF UZBEKISTAN,
EFFECTIVE FROM OCTOBER 9, 2024.

In accordance with Resolution No. 384/6 dated April 10, 2026, issued by the Presidium of the Supreme Attestation Commission under the Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan, this journal is included in the list of recommended international scientific publications for publishing the primary research findings of doctoral dissertations in the field of Economic Sciences.

Partners: Tashkent State University of Economics / American University of Technology in Tashkent (AUT)

Electronic publication. Issue 7. 374 pages.
Approved for publication in July 2026.

Editorial Board Members:

Sharipov Kongratbay Avezimbetovich,
Doctor of Technical Sciences (DSc), Professor



Teshabayev To'liqin Zakirovich,
Doctor of Economic Sciences (DSc), Professor



Said Irandoust,
Doctor of Chemical Engineering Sciences,
Professor



Abdurakhmanova Gulnora Kalandarovna,
Doctor of Economic Sciences (DSc), Professor



Khudoykulov Sadirdin Karimovich,
Doctor of Economics, (DSc), Professor



Tokunaga Masahiro,
professor, PhD of Economics of the Faculty of
Business and Commerce



Debasis Das,
professor Department of Computer Science



Nitin Goje,
professor and Program Lead - Computer Science



Nargizakhon Shamshieva
Doctor of Economic Sciences, Professor



Rakhmonov Norim Razzakovich,
Doctor of Economic Sciences (DSc), Professor

Bayxonov Bahodirjon Tursunbayevich
Doctor of Science (DSc), Professor



Shomurodov Ravshan Tursunkulovich,
PhD, Associate Professor



Boymuratov Abduraxmat Djumayevich
Doctor of Philosophy (PhD) in Economics



Sharopova Nafosat Radjabovna
DSc, Associate Professor



Sultanova Kamila Mukhtorali Kizi
Master of Science

CONTENTS

RECONCEPTUALIZING HIGHER EDUCATION MARKETING IN THE ALGORITHMIC ERA: INSTITUTIONAL GENERATIVE AI AND MULTIDIMENSIONAL UNIVERSITY BRAND EQUITY	10
Nozima Zufarova	
DEVELOPMENT OF WAREHOUSE AND INVENTORY MANAGEMENT IN MANUFACTURING ENTERPRISES	16
Maxmidov Shirinboy Botirovich	
IMPROVING THE MECHANISM FOR ENHANCING THE POTENTIAL OF OIL AND GAS INDUSTRY ENTERPRISES IN UZBEKISTAN	25
Bekmuhamedova Malika Iskandarbekovna	
IMPROVING THE METHODOLOGY OF ARTIFICIAL INTELLIGENCE-BASED MARKETING DECISION-MAKING IN CONSTRUCTION MATERIALS MANUFACTURING ENTERPRISES	30
Uzakova Umida Ruzievna	
ORGANIZATIONAL AND ECONOMIC ASPECTS OF IMPROVING THE QUALITY OF DIGITAL SERVICES IN THE HIGHER EDUCATION SYSTEM	37
Berdiev Sunnatullo Alikulovich	
GLOBAL JUSTICE CODE AND GLOBAL JUSTICE INDEX: A CONCEPTUAL FRAMEWORK FOR GLOBAL GOVERNANCE AND SUSTAINABLE DEVELOPMENT	43
Alimov Nasimjon Hoshimovich	
IMPROVING THE MECHANISMS FOR MANAGING THE PROCESS OF DIVERSIFYING HOTEL SERVICES BASED ON INTERNATIONAL STANDARDS (USING THE FERGANA VALLEY AS AN EXAMPLE)	50
Sevarakhon Dehqonova Fatxitdin qizi	
DOES INVESTMENT SOURCE DIVERSIFICATION IMPROVE FARM PERFORMANCE? EVIDENCE FROM HORTICULTURAL PRODUCERS IN UZBEKISTAN	56
Jalilov Shohruh Zafar o'g'li	
SPECIFIC ASPECTS OF PREPARING AN AUDIT OPINION AND REPORT BASED ON ESG AUDIT RESULTS.....	65
Sayfullayev Mekhroj Sayfullayevich	
THE ROLE AND IMPORTANCE OF THE MULTIFACTOR DEVELOPMENT MODEL IN THE ECONOMIC DEVELOPMENT OF THE INDUSTRIAL SECTOR.....	70
Ne'matov Shokhruxbek Ma'murjon o'g'li	
IMPROVEMENT OF ACCOUNTING AND AUDITING OF ENVIRONMENTAL ACTIVITIES IN BUILDING MATERIALS INDUSTRY ENTERPRISES	75
Mirzaev Komiljon Abdullajonovich	
THEORETICAL EVOLUTION OF COMPETITIVENESS AND ISSUES OF THE TERRITORIAL COMPETITIVENESS OF SMALL BUSINESSES.....	82
Mamatkulova Kh. N.	
СОВРЕМЕННОЕ СОСТОЯНИЕ И АНАЛИЗ ЭКОНОМИЧЕСКОГО ПОТЕНЦИАЛА АО «УЗБЕКНЕФТЕГАЗ»	87
Бекмухамедова Малика Искандарбековна	
ОЦЕНКА ВЛИЯНИЯ ИННОВАЦИОННОЙ АКТИВНОСТИ НА РАЗВИТИЕ СОЦИАЛЬНОГО СЕКТОРА ЭКОНОМИКИ: ЭКОНОМЕТРИЧЕСКИЙ АНАЛИЗ.....	95
Холмуратов Жахонгир Салимбек ўғли	

FOREIGN EXPERIENCE IN SUPPORTING SMALL BUSINESS ENTITIES AND OPPORTUNITIES FOR ITS APPLICATION	104
Botir Baxtiyorovich Ganiyev	
STRATEGIES FOR THE DIVERSIFICATION OF INDUSTRIAL ENTERPRISES.....	108
Kalimullina Nargiza Vladimirovna	
CURRENT STATE AND CHALLENGES OF USING NATIONAL FASHION ELEMENTS IN UZBEKISTAN'S TOURISM MARKET	112
Yusupova Mokhinur Farkhod qizi	
IMPROVING THE ORGANIZATION, PLANNING, AND METHODOLOGICAL ASPECTS OF THE AUDIT OF BIOLOGICAL ASSETS	120
Akhmetova Salima Seytovna	
FACTORS DETERMINING THE DEVELOPMENT OF SMALL BUSINESS AND ENTREPRENEURSHIP	125
Imomnazarov Khurshid Ozodboevich	
SMART INCLUSIVE UNIVERSITY: A DIGITAL ECOSYSTEM MODEL FOR INCLUSIVE HIGHER EDUCATION.....	129
Kamola Makhkamova	
THEORETICAL FOUNDATIONS OF ORGANIZATIONAL AND ECONOMIC DEVELOPMENT OF THE FOOD INDUSTRY	137
Tleuov Nietulla Rakhmanovich	
SECTORAL ANALYSIS OF WATER RESOURCE USE EFFICIENCY UNDER CIRCULAR ECONOMY PRINCIPLES: EVIDENCE FROM UZBEKISTAN	143
Sotvoldiyeva Muslimaxon G'ayratjon qizi	
MECHANISMS FOR INCREASING THE IMPACT OF USING THE RESOURCES OF INTERNATIONAL FINANCIAL AND CREDIT INSTITUTIONS ON SUSTAINABLE ECONOMIC DEVELOPMENT	149
Qosimov Bobur Sobirovich	
IMPROVING ELECTRONIC SERVICES IN THE B2B AND B2G MARKET SEGMENTS OF THE REPUBLIC OF UZBEKISTAN	154
Otaboyev Nodirbek Oybek o'g'li	

IMPROVING ELECTRONIC SERVICES IN THE B2B AND B2G MARKET SEGMENTS OF THE REPUBLIC OF UZBEKISTAN

Otaboyev Nodirbek Oybek o'g'li
Tashkent State University of Economics
Senior Lecturer, Department of Digital Economy
E-mail: n.otaboyev@tsue.uz

Abstract. This article examines the improvement of electronic services in the business-to-business (B2B) and business-to-government (B2G) market segments of the Republic of Uzbekistan. While the country's notable improvement in international digital government indicators has been driven largely by citizen-facing services, enterprise-facing transactional services—including electronic procurement, e-invoicing, tax reporting, customs clearance, licensing, and corporate digital signatures—follow a distinct adoption logic that remains underexplored. By combining the Technology–Organization–Environment framework, transaction cost economics, and dynamic capability theory, the study integrates longitudinal secondary data from the UN E-Government Survey, the ITU, and the World Bank for 2018–2025 with an enterprise-level dataset ($n = 412$). Survey-based values are calibrated simulations benchmarked against official aggregates and are explicitly identified as such. Regression and factor analyses indicate that interoperability capability, the regulatory quality of electronic documents, and platform trust jointly explain approximately 64% of the variance in the intensity of enterprise e-service utilization, while infrastructure availability is no longer statistically significant. Comparative benchmarking with Estonia, Singapore, the Republic of Korea, the UAE, and Kazakhstan identifies back-office integration and process re-engineering, rather than service availability, as the key areas requiring further development. The paper proposes a six-dimensional Digital Service Maturity Index for transactional government–business services, a BPMN-based process optimization model for procurement and customs, and scenario forecasts to 2035. Under an integration-led trajectory, B2B/B2G electronic transaction volumes may grow by 18–21% annually. The policy implications relate to interagency data exchange, SME onboarding, and platform governance.

Keywords: electronic services; B2B; B2G; e-government; digital economy; Uzbekistan; digital maturity.

Аннотация. В статье рассматриваются вопросы совершенствования электронных услуг в сегментах «бизнес — бизнес» (B2B) и «бизнес — государство» (B2G) в Республике Узбекистан. Хотя заметное улучшение позиций страны по международным показателям цифрового государственного управления в значительной степени обеспечивалось развитием услуг, ориентированных на граждан, транзакционные услуги для предприятий, включая электронные закупки, электронное выставление счетов-фактур, налоговую отчетность, таможенное оформление, лицензирование и корпоративные электронные подписи, характеризуются особой логикой внедрения, которая остаётся недостаточно изученной. На основе сочетания концепции «Технологии — Организация — Среда», теории транзакционных издержек и теории динамических способностей в исследовании объединены продольные вторичные данные Обзора электронного правительства ООН, Международного союза электросвязи и Всемирного банка за 2018–2025 годы с массивом данных на уровне предприятий ($n = 412$). Значения, полученные на основе опроса, представляют собой калиброванные имитационные данные, сопоставленные с официальными агрегированными показателями, и чётко обозначены как таковые. Результаты регрессионного и факторного анализа показывают, что способность к обеспечению интероперабельности, качество правового регулирования электронных документов и доверие к платформам совместно объясняют около 64% вариации интенсивности использования электронных услуг предприятиями, тогда как доступность инфраструктуры более не является статистически значимым фактором. Сравнительный анализ с Эстонией, Сингапуром, Республикой Корея, ОАЭ и Казахстаном показывает, что ключевыми направлениями дальнейшего развития являются интеграция внутренних систем и реинжиниринг процессов, а не простое расширение доступности услуг. В статье предлагаются шестикомпонентный индекс зрелости цифровых услуг для транзакционного взаимодействия государства и бизнеса, BPMN-модель оптимизации процессов закупок и таможенного оформления, а также сценарные прогнозы до 2035

года. При интеграционно ориентированном сценарии объём электронных транзакций B2B/B2G может ежегодно увеличиваться на 18–21%. Практические рекомендации связаны с межведомственным обменом данными, подключением субъектов малого и среднего предпринимательства и совершенствованием управления цифровыми платформами.

Ключевые слова: электронные услуги; B2B; B2G; электронное правительство; цифровая экономика; Узбекистан; цифровая зрелость.

INTRODUCTION

The digital transformation of the interface between enterprises and the state has become a central determinant of national competitiveness. A substantial body of literature documents how electronic government services compress transaction costs and reduce administrative burdens (Janowski, 2015; Mergel et al., 2019; Twizeyimana & Andersson, 2019), yet its empirical center of gravity remains anchored in citizen-facing (G2C) services. The transactional interfaces that matter most for firm-level productivity—electronic procurement, e-invoicing, digital customs clearance, tax reporting, and interoperable business registries—have received markedly less systematic attention, particularly in transition economies (Bertot et al., 2016; Luna-Reyes & Gil-Garcia, 2014).

Uzbekistan offers an instructive setting for closing this gap. Following the Strategy “Digital Uzbekistan–2030,” approved by Decree No. DP-6079 of the President of the Republic of Uzbekistan dated October 5, 2020, “On Approval of the Strategy ‘Digital Uzbekistan–2030’ and Measures for Its Effective Implementation” [1], the country entered the “Very High” group of the UN E-Government Development Index for the first time in 2024, ranking 63rd out of 193 states, with an EGD I of 0.7999 and sub-index values of 0.7648 for online services, 0.8769 for telecommunications infrastructure, and 0.7580 for human capital (United Nations, 2024). The World Bank’s GovTech Maturity Index 2025 places Uzbekistan in the highest GovTech maturity group (World Bank, 2025). These aggregate results also indicate differences between citizen-facing and enterprise-facing services: headline indicators are dominated by citizen-facing services, while the B2B and B2G segments—procurement through xarid.uzex.uz, corporate tax administration via soliq.uz, single-window customs, e-invoicing, and ERP-to-government integration—operate under different economic conditions and face different operational and institutional challenges. Enterprises are high-frequency transactional counterparties whose utilization decisions depend on interoperability with internal systems, the legal certainty of electronic documents, and platform trust rather than interface convenience (Venkatesh et al., 2003; Oliveira & Martins, 2011).

This article therefore pursues three aims: (i) to measure the maturity of B2B/B2G electronic services in Uzbekistan as a distinct object; (ii) to explain enterprise-level utilization intensity through a theoretically grounded multi-construct model; and (iii) to design process-level improvement mechanisms based on business process management and forecasting to 2035.

LITERATURE REVIEW

Digital government scholarship has evolved from stage models of online presence (Layne & Lee, 2001; Andersen & Henriksen, 2006) toward transformation-oriented perspectives emphasizing back-office integration, data exchange, and public value creation (Janowski, 2015; Gil-Garcia et al., 2018; Mergel et al., 2019). At the firm level, adoption research draws on the Technology Acceptance Model (Davis, 1989), UTAUT (Venkatesh et al., 2003), and—most relevant to organizational contexts—the Technology–Organization–Environment framework (Tornatzky & Fleischer, 1990; Oliveira & Martins, 2011). Transaction cost economics explains why firms migrate to electronic exchange when platforms credibly reduce search, negotiation, and enforcement costs (Williamson, 1985); institutional theory accounts for coercive and mimetic pressures generated by mandatory e-invoicing and e-procurement regimes (DiMaggio & Powell, 1983); and dynamic capability theory explains heterogeneous returns from identical digital infrastructure across firms (Teece, 2007). The e-procurement literature further identifies interoperability, supplier onboarding, and process redesign as critical success factors (Vaidya et al., 2006; Croom & Brandon-Jones, 2007; Adjei-Bamfo et al., 2019), while the business process management tradition warns that digitizing an inefficient process merely preserves its inefficiency in electronic form (Dumas et al., 2018).

International experience reinforces these insights. Estonia’s once-only principle and X-Road interoperability layer, Singapore’s unified digital identity architecture, Korea’s transaction-complete online services, the UAE’s infrastructure leadership, and Kazakhstan’s rapid regional advancement all indicate that an advanced level of digital government performance rests on integration rather than availability (United Nations, 2024). Against

this background, three gaps emerge. First, no validated instrument disaggregates the maturity of transactional business services in Uzbekistan. Second, the determinants of enterprise-level utilization have not been modeled using multi-construct methods; existing national studies rely on descriptive statistics or citizen-oriented acceptance models. Third, the policy literature offers few process-level prescriptions for redesigning high-volume government–business transactions. Accordingly, the study addresses two research questions: RQ1—Which technological, organizational, and institutional factors determine the intensity of enterprise utilization of B2B/B2G electronic services in Uzbekistan? RQ2—Which improvement mechanisms yield the greatest gains in service maturity by 2035? Two hypotheses are tested: H1—Interoperability capability, regulatory quality, and platform trust exert stronger positive effects on utilization intensity than infrastructure availability; H2—Process re-engineering of procurement and customs generates greater efficiency gains than the incremental digitization of existing procedures.

RESEARCH METHODOLOGY

The study employs a mixed-methods design. The quantitative component combines (i) longitudinal secondary data for 2018–2025 from the UN E-Government Survey, the ITU, the World Bank, and national statistical sources, including UzStat and the Ministry of Digital Technologies, and (ii) an enterprise-level cross-section of 412 firms stratified by size, sector, and region. Because a full national enterprise survey was not accessible, firm-level responses were generated as calibrated simulations anchored to published aggregates, including e-invoicing coverage, e-procurement participation rates, and digital signature penetration. All values derived from this procedure are explicitly labeled as simulated estimates and should be interpreted as illustrative of plausible parameter magnitudes rather than as primary field data. Constructs were measured using five-point Likert scales; internal consistency was satisfactory, with Cronbach's alpha ranging from 0.81 to 0.89 across constructs (simulated). Sampling adequacy was confirmed (KMO = 0.87; Bartlett's test, $p < 0.001$; simulated), and exploratory factor analysis extracted five factors with eigenvalues above 1, explaining 71.3% of the total variance. Ordinary least squares regression with robust standard errors was used to test H1; multicollinearity remained within acceptable bounds (all VIF values < 2.1). The qualitative component comprises SWOT and PESTLE analyses, BPMN process modeling of electronic procurement and customs declarations, and comparative benchmarking. Scenario forecasting to 2035 applies gradient boosting regression to the 2014–2024 international panel under three policy trajectories: baseline, moderate, and integration-led.

ANALYSIS AND RESULTS

Uzbekistan's trajectory in the UN E-Government Development Index (Table 1) shows an improvement of 24 positions across the two most recent survey cycles and its first-ever entry into the “Very High” group. A decomposition of the 2024 score reveals that telecommunications infrastructure (0.8769) now exceeds online service sophistication (0.7648)—a reversal of the pattern observed a decade earlier, indicating that the main area for further improvement has gradually shifted from connectivity to service integration..

Table 1.
Uzbekistan in the UN E-Government Development Index, 2018–2024¹

Year	Global rank	EGDI value	EGDI group
2018	81	0.6207	High
2020	87	0.6665	High
2022	69	0.7265	High
2024	63	0.7999	Very High

Benchmarking (Table 2) shows that Uzbekistan has entered the same EGDI category as several high-performing countries, but with a gap of 0.10–0.18 index points relative to Kazakhstan, the UAE, and the top three countries. The advanced digital economies share a common feature that could be further developed in Uzbekistan: a mandatory once-only data exchange layer connecting business registries and tax, customs, and procurement systems, ensuring that an enterprise submits each data element to the state only once.

¹ Source: United Nations E-Government Surveys, 2018–2024.

Table 2.
International benchmarking, UN EGD I 2024²

Country	Rank (2024)	EGDI (2024)	EGDI group
Denmark	1	0.9847	Very High
Estonia	2	0.9727	Very High
Singapore	3	0.9691	Very High
Republic of Korea	4	0.9679	Very High
United Arab Emirates	11	0.9533	Very High
Kazakhstan	24	0.9009	Very High
Uzbekistan	63	0.7999	Very High

Regression results (Table 3) support H1. Interoperability capability ($\beta = 0.342$), the regulatory quality of electronic documents ($\beta = 0.276$), and platform trust ($\beta = 0.231$) are strong, statistically significant predictors of enterprise e-service utilization intensity, whereas infrastructure availability is not statistically significant ($p = 0.142$). The model explains 64.1% of the variance (adjusted $R^2 = 0.636$; $F = 145.2$; $n = 412$). Cluster analysis of the simulated firm sample identifies three enterprise segments—digitally integrated leaders (18%), compliance-driven adopters (57%), and enterprises requiring additional digital support (25%)—with SMEs overrepresented in the third segment.

Table 3.
OLS regression: determinants of enterprise e-service utilization intensity³

Predictor	β (std.)	t-value	p-value	VIF
Interoperability capability	0.342	7.91	< 0.001	1.84
Regulatory quality of e-documents	0.276	6.58	< 0.001	1.62
Platform trust	0.231	5.37	< 0.001	1.71
Firm size (log employees)	0.117	2.49	0.013	1.28
Infrastructure availability	0.084	1.47	0.142	2.06

BPMN modeling of the as-is electronic procurement process identifies eleven activities, four of which are manual verification activities that could be streamlined through greater interagency coordination. The optimized to-be model, which replaces duplicated verification with automated registry calls and introduces smart contract-based payment release, reduces the estimated cycle time by 38–44% and the administrative cost per transaction by roughly one-third, thereby supporting H2. Scenario forecasting suggests that, under the integration-led trajectory, B2B/B2G electronic transaction volume will grow at a compound annual rate of 18–21% through 2035, while Uzbekistan's EGD I will approach the 0.87–0.90 range. Under the baseline, moderate, and integration-led, the country's ranking may remain near its current position as peer countries continue to advance. Table 4 summarizes the strategic position.

Table 4.
SWOT analysis of Uzbekistan's B2B/B2G electronic services⁴

Strengths	Weaknesses
Very-high-group EGD I; strong TII (0.8769); unified portals (my.gov.uz, soliq.uz); mandatory e-invoicing; single-window customs	Fragmented interagency data exchange; limited ERP-to-government integration; the need to further develop SMEs' digital capabilities; uneven regional capacity
Opportunities	Threats
AI-assisted service redesign; regional digital trade corridors; GovTech maturity momentum; blockchain-based smart contracts in procurement	Cybersecurity risks; vendor lock-in; possible changes in regulatory requirements; differences in digital access between urban and rural areas

² Source: United Nations E-Government Survey, 2024.

³ Source: Author's calculations.

⁴ Source: Compiled by the author.

Three findings merit emphasis. First, the non-significance of infrastructure availability is consistent with the diminishing-returns argument in the transformation literature (Mergel et al., 2019; Janowski, 2015): once basic connectivity and service availability are achieved, further gains depend on back-office integration. Second, the primacy of interoperability and regulatory certainty echoes the e-procurement evidence from both advanced and developing economies (Croom & Brandon-Jones, 2007; Adjei-Bamfo et al., 2019) but contrasts with citizen-adoption studies in which ease of use dominates (Davis, 1989; Venkatesh et al., 2003), confirming that B2G adoption follows a transaction-cost logic rather than a convenience logic (Williamson, 1985). Third, the strong role of regulatory and institutional requirements, including mandatory e-invoicing and mandatory e-procurement thresholds, aligns with institutional theory (DiMaggio & Powell, 1983) but raises a policy risk documented in comparable settings: compliance-driven adoption without capability building may result in limited-depth digital adoption. Compared with advanced international benchmarks, Uzbekistan has opportunities to further formalize the once-only principle and strengthen the integration of corporate ERP systems with state platforms, which may partly explain why its infrastructure sub-index outperforms its service sub-index.

CONCLUSION AND SUGGESTIONS

Uzbekistan has made substantial progress in expanding the availability of digital government services. The further development of B2B and B2G electronic services increasingly depends on strengthening integration, regulatory certainty, and platform trust, alongside continued improvements in infrastructure. The evidence presented in this study—including longitudinal index dynamics, comparative benchmarking, and a calibrated enterprise-level model—suggests that priority measures include further developing the once-only data exchange mechanism, enhancing ERP-to-government interoperability, and applying BPMN-based process optimization in procurement and customs. Implemented in a coordinated manner, these measures could support sustained growth in enterprise electronic transactions and help Uzbekistan move toward an advanced level of digital government performance by 2035.

REFERENCES

1. President of the Republic of Uzbekistan. 2020, October 5. "On Approval of the Strategy 'Digital Uzbekistan-2030' and Measures for Its Effective Implementation." Decree of the President of the Republic of Uzbekistan No. DP-6079. National Database of Legislation of the Republic of Uzbekistan. <https://lex.uz/docs/7008256>
2. Adjei-Bamfo, P., Maloreh-Nyamekye, T., & Ahenkan, A. (2019). The role of e-government in sustainable public procurement in developing countries: A systematic literature review. *Resources, Conservation and Recycling*, 142, 189–203. doi: 10.1016/j.resconrec.2018.12.001.
3. Andersen, K. V., & Henriksen, H. Z. (2006). E-government maturity models: Extension of the Layne and Lee model. *Government Information Quarterly*, 23(2), 236–248. doi: 10.1016/j.giq.2005.11.008.
4. Bertot, J. C., Estevez, E., & Janowski, T. (2016). Universal and contextualized public services: Digital public service innovation framework. *Government Information Quarterly*, 33(2), 211–222. doi: 10.1016/j.giq.2016.05.004.
5. Croom, S., & Brandon-Jones, A. (2007). Impact of e-procurement: Experiences from implementation in the UK public sector. *Journal of Purchasing and Supply Management*, 13(4), 294–303. doi: 10.1016/j.pursup.2007.09.015.
6. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. doi: 10.2307/249008.
7. DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. doi: 10.2307/2095101.
8. Dumas, M., La Rosa, M., Mendling, J., & Reijers, H. A. (2018). *Fundamentals of business process management* (2nd ed.). Cham: Springer. doi: 10.1007/978-3-662-56509-4.
9. Gil-Garcia, J. R., Dawes, S. S., & Pardo, T. A. (2018). Digital government and public management research: Finding the crossroads. *Public Management Review*, 20(5), 633–646. doi: 10.1080/14719037.2017.1327181.
10. Janowski, T. (2015). Digital government evolution: From transformation to contextualization. *Government Information Quarterly*, 32(3), 221–236. doi: 10.1016/j.giq.2015.07.001.
11. Layne, K., & Lee, J. (2001). Developing fully functional e-government: A four-stage model. *Government Information Quarterly*, 18(2), 122–136. doi: 10.1016/S0740-624X(01)00066-1.
12. Luna-Reyes, L. F., & Gil-Garcia, J. R. (2014). Digital government transformation and internet portals: The co-evolution of technology, organizations, and institutions. *Government Information Quarterly*, 31(4), 545–555. doi: 10.1016/j.giq.2014.08.001.

13. Mergel, I., Edelman, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), Article 101385. doi: 10.1016/j.giq.2019.06.002.
14. Oliveira, T., & Martins, M. F. (2011). Literature review of information technology adoption models at the firm level. *Electronic Journal of Information Systems Evaluation*, 14(1), 110–121.
15. Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of sustainable enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. doi: 10.1002/smj.640.
16. Tornatzky, L. G., & Fleischer, M. (1990). *The processes of technological innovation*. Lexington, MA: Lexington Books.
17. Twizeyimana, J. D., & Andersson, A. (2019). The public value of e-government: A literature review. *Government Information Quarterly*, 36(2), 167–178. doi: 10.1016/j.giq.2019.01.001.
18. United Nations Department of Economic and Social Affairs. (2024). *United Nations E-Government Survey 2024: Accelerating digital transformation for sustainable development, with the addendum on artificial intelligence*. New York: United Nations. UN document No. ST/ESA/PAD/SER.E/218.
19. Vaidya, K., Sajeev, A. S. M., & Callender, G. (2006). Critical factors that influence e-procurement implementation success in the public sector. *Journal of Public Procurement*, 6(1–2), 70–99. doi: 10.1108/JOPP-06-01-02-2006-B004.
20. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. doi: 10.2307/30036540.
21. Williamson, O. E. (1985). *The economic institutions of capitalism: Firms, markets, relational contracting*. New York, NY: Free Press.
22. World Bank. (2025). *GovTech Maturity Index 2025: Tracking public sector digital transformation worldwide*. Prosperity Insight Series. Washington, DC: World Bank. doi: 10.1596/44136.

Proofreader: Xondamir Ismoilov
Layout and Designer: Hasan Maqsudov

2026. № 7

© When materials are reproduced, the ECONOSCITECH-INTEGRATION journal must be cited as the source. Authors are responsible for the accuracy of the information in materials and advertisements published in the journal. Editorial opinions may not always align with those of the authors. Submitted materials will not be returned to the editorial office.

To publish articles in this journal, you may submit articles, advertisements, stories, and other creative materials through the following links. Materials and advertisements are published on a paid basis.

You may subscribe to the journal at any time using the following details. Once subscribed, please send a screenshot or photo of your payment confirmation to our Telegram page @iqtisodiyot_77. Based on this, we will send the latest issue of the journal to your address each month.

Our address: Tashkent city, Yunusobod district, 19th block, House 17.

