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ROZWÓJ E-ADMINISTRACJI JAKO NARZĘDZIA ZWIĘKSZAJĄCEGO PRZEJRZYSTOŚĆ I ROZLICZALNOŚĆ RZĄDU NA UKRAINIE

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Adnotacja. Badanie oceniło rozwój narzędzi e-administracji w kontekście zwiększenia przejrzystości i rozliczalności w systemie administracji publicznej Ukrainy. Wysiłki Ukrainy w walce z korupcją zyskały szczególne znaczenie, w szczególności ze względu na wzmocnienie ram regulacyjnych antykorupcyjnych. Udane śledztwa, środki egzekwowania prawa i wyroki skazujące wskazują na determinację państwa w walce z korupcją. Pomimo tych kroków, w 2024 r. Ukraina zajęła 105. miejsce na 180 krajów w Indeksie Percepcji Korupcji. Głównym celem badania była ocena poziomu rozwoju odpowiednich narzędzi cyfrowych i ich wpływu na skuteczność administracji publicznej. Podstawą metodologiczną była analiza danych wtórnych, wykorzystująca analizę treści jako wiodącą metodę analityczną. Wyniki badania pokazują w szczególności, że platformy takie jak „Diya" i Prozorro znacząco przyczyniły się do zwiększenia rozliczalności, wydajności, opłacalności i przejrzystości działań organów publicznych. Digitalizacja procesów świadczenia usług publicznych przyczyniła się do wzrostu poziomu zaufania publicznego do instytucji publicznych.
Słowa kluczowe: korupcja, zamówienia elektroniczne, ramy regulacyjne, zaufanie publiczne, cyfryzacja, świadczenie usług.

DEVELOPMENT OF E-GOVERNANCE AS A TOOL FOR INCREASING TRANSPARENCY AND ACCOUNTABILITY OF GOVERNMENT IN UKRAINE

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Abstract. The study assessed the development of e-governance tools in enhancing transparency and accountability within the government of Ukraine. Ukraine's efforts to combat corruption have become particularly notable, especially by reinforcing anti-corruption frameworks. Successful investigations, enforcement measures, and resulting convictions reflect the government's firm commitment to addressing corruption. Despite these measures, Ukraine was ranked 105th out of 180 countries in the 2024 Corruption Perceptions Index. The study's main objective was to evaluate the development of such tools and their impact on governance outcomes. A secondary research approach was employed, relying on existing data sources and utilising content analysis as the primary analytical method. The findings indicate, among other things, that platforms such as Diia and Prozorro have significantly contributed to enhanced accountability, efficiency, cost-effectiveness, and transparency in governmental operations. kraine has increased public trust in state institutions. through digitalising public services processes.
Key words: corruption, e-procurement, framework, public trust, digitisation, service delivery.

РОЗВИТОК ЕЛЕКТРОННОГО УПРАВЛІННЯ ЯК ІНСТРУМЕНТУ ПІДВИЩЕННЯ ПРОЗОРОСТІ ТА ПІДЗВІТНОСТІ ВЛАДИ В УКРАЇНІ

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Анотація. У дослідженні здійснено оцінку розвитку інструментів електронного урядування в контексті підвищення прозорості та підзвітності в системі державного управління України. Зусилля України у сфері бороть-

би з корупцією набули особливої значущості, зокрема через посилення антикорупційної нормативно-правової бази. Успішні розслідування, заходи правозастосування та винесені вироки свідчать про рішучу налаштованість держави протидіяти корупційним проявам. Незважаючи на ці кроки, у 2024 році Україна посіла 105-те місце зі 180 країн у Індексі сприйняття корупції. Основною метою дослідження було оцінити рівень розвитку відповідних цифрових інструментів та їхній вплив на ефективність державного управління. Методологічною основою слугував вторинний аналіз даних із використанням контент-аналізу як провідного аналітичного методу. Результати дослідження засвідчують, зокрема, що такі платформи, як «Дія» та Prozorro, істотно сприяли підвищенню підзвітності, ефективності, економічності та прозорості діяльності органів державної влади. Цифровізація процесів надання державних послуг сприяла зростанню рівня суспільної довіри до державних інституцій.

Ключові слова: корупція, електронні закупівлі, нормативна база, суспільна довіра, цифровізація, надання послуг.

1. Introduction. Corruption is a significant obstacle to economic growth as it leads to financial losses and undermines public trust across the globe. According to the United Nations (2020), corruption has led to the loss of $2.6 trillion or 2.7% of GDP worldwide, while global bribery amounted to $1.6 trillion (Cost of corruption – GIACC, 2024).

In a 2014 report, EU Internal Commissioner Cecilia Malstrom estimated that corruption would cost the European economy about 120 billion euros per year, based on an analysis of corruption statistics from 28 EU member states (Shama, 2018).

Ukraine has made its anti-corruption measures more visible through developing and reinforcing its anti-corruption systems. The strong official support for fighting corruption becomes apparent through effective investigations that produced law enforcement outcomes, which led to multiple convictions, especially for renowned public officials (European Commission, 2023). Ukraine accelerated its anti-corruption reforms after applying for EU candidacy. The effectiveness of these reforms depends on continuous review and backing from experts to maintain their integrity when managing foreign investments and funds (European Commission, 2023).

Despite these initiatives, Ukraine ranked 105th out of 180 countries in the 2024 Corruption Perceptions Index, a notable decline compared to the previous year (Transparency International, 2024). Prior to Russia's invasion, Ukraine had actively pursued anti-corruption reforms; this reform follows the annexation of Crimea and the Russian invasion of eastern Ukraine in 2014. However, the limitations of the reforms include a lack of vision and a systematic approach to the execution of the policy. According to Kalitenko (2023), the 2022 full-scale invasion and outbreak of war shifted priorities, but the fight against corruption persisted in Ukraine. Ukraine is closer to achieving EU entry requirements, which is more positive than negative anti-corruption (Lennon, 2023). However, the recent decline in its corruption ranking highlights the need for sustained efforts to strengthen institutional mechanisms and ensure long-term accountability. E-Governance is one of the mechanisms that has been proven to affect corruption checking considerably. This digital revolution promotes broader socioeconomic development and improved service delivery (Kumar et al., 2025; Ramzy & Ibrahim, 2022; Bertot et al., 2010).

Ukraine has made progress in strengthening the financial sector and revising its legal and regulatory structure. However, further work is needed to improve accountability and openness in the fight against corruption (US Department of State, 2023). Anti-corruption mechanisms have become more effective, but these legal developments will also change public attitudes. In 2023, 89% of the population said corruption was the second most important issue after the full-scale war. Nevertheless, Ukrainians report less corruption daily than before and are increasingly intolerant of bribery. Nevertheless, the network of people under the unwritten "rules of the game" that serve both political and social purposes continues to promote the systematic issue of corruption in Ukraine despite

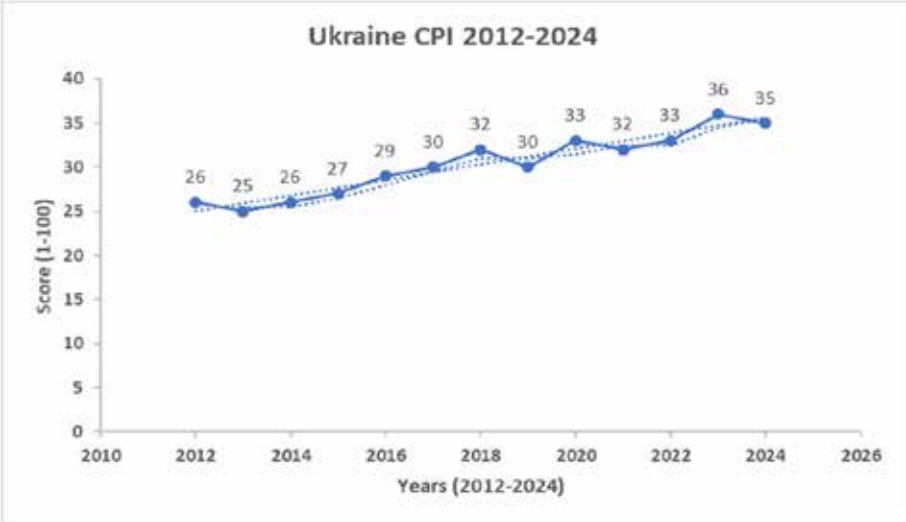

Figure 1. Trends of corruption Perception Index for Ukraine (2012–2024)
Source: Transparency International (2012–2024)

the latest developments. Ukraine ranked 105th out of 180 countries in the 2024 Corruption Perceptions Index with a score of 35/100, a notable decline compared to the previous year, when the country scored 36/100 (Transparency International, 2024).

Particularly about platforms such as Diia and Prozorro, considering the slow introduction, key questions about e-government capabilities will be raised, increasing public accountability. Therefore, it is important to examine how e-government and public accountability are related and the variables that influence the acceptance of e-government in Ukraine (National Agency on Corruption Prevention, 2020).

This study investigates how e-government initiatives can enhance transparency and accountability in Ukraine's government. The research explores how the Diia and Prozorro ecosystem fills an important gap in understanding the systematic contributions of e-government to transparency and accountability goals. The research investigates e-government projects' impact on developing Ukrainian government transparency and accountability practices. This study needs to evaluate Diia and Prozorro as tools that help ensure accountability because they represent major gaps in current knowledge. This study will deliver an organized and beneficial set of guidelines for political decision-making. The current research recognizes key information deficits for digital governance technologies regarding their transparency potential. The document sets out successful e-government approaches which serve general developmental objectives in multiple socioeconomic settings (Ishengoma & Shao, 2025). In addition to assessing its economic impact, this study examines how the Prozorro system as e-government technology and the Diia portal improve accountability and openness in Ukraine's administration. The research raises the following questions:

1. How does the Diia portal improve transparency and accountability in public service delivery in Ukraine?
2. How does the Prozorro system improve transparency and accountability in the procurement process in Ukraine?
3. What are the economic benefits and challenges associated with implementing Diia and Prozorro in terms of cost savings, efficiency, and reduction of corruption

2. Literature review

E-Governance: A Historical Background

E-governance or e-governance refers to using information and communication technologies (ICTs) to improve the delivery of government services, enhance management procedures, and improve transparency and citizen engagement (Ishengo &, 2025). This includes integrating digital technologies into state agencies to improve efficiency, accessibility, and general governance quality (Milakovich, 2021). Previously, governments were based on manual processes and personal interactions, making management times unstable and inefficient. Governance was primarily based on paper until the 19th and 20th centuries of telecommunication technology, making communication more likely to be faster, but traditional methods remained (O'Regan, 2021). The development of the Internet in the second half of the 20th century allowed for more dedicated and linked digital systems, and governments changed further (Padua, 2020). ICT is used by e-government to improve government activities' effectiveness, efficiency and transparency (Shava & Vyas Doorgapersad, 2023; Li & Ding, 2020). This includes many digital services, including online tax registration, permit application, and e-procurement, which allow online interaction between individuals, businesses and government agencies (Kholid & Sari, 2022). Using digital technologies to maximize public services, increase management effectiveness, and encourage increased commitment to citizens is a revolutionary change in government.

The Concept of Electronic Government

According to the World Bank (2019) definition, e-government is utilising information technologies encompassing mobile computing, Internet systems, and various networks to establish government relations with businesses, citizens and other agencies. Weslatt defines e-government as implementing information and communication technology to better deliver public services while decreasing the expenses of matching new citizen obligations (Daud et al., 2020). To support and accelerate future governance processes, the government responded by investing in developing digital platforms (Rachmawati & Fitriyanti, 2021). Furthermore, the government's commitment to improving the quality of public services through digital transformation by publishing Education No. 3 since 2003 has been demonstrated in national politics and strategies for developing e-government (Sabani, 2021).

Transparency and Accountability

The term "transparent" means open, honest, and straightforward. According to the principle of openness, all people have the right to obtain information about the administration of government, such as guidelines, their creation, implementation, and outcomes (Cruz Romero, 2023). Accountability also requires that those responsible for monitoring public resources be held responsible for decision-making and action. It is an important part of governance as it monitors the performance of public services and ensures that results are generally transparently reported (Dwangun & Mahlangu, 2021). Accountability requires people and agencies to be held responsible for their actions, and transparency ensures unlimited access to information and thus strengthens government trust and integrity (Vuorenmaa, 2024).

E-Governance international data

The key integrated indicator, EGDI (Electronic Government Development Index), was first evaluated in 2003 and has been calculated since 2001 by the United Nations Ministry of Economic and Social Affairs. This analysis assesses the degree of e-government development and decision-maker member countries to determine e-government guidelines and strategies. The three generalized indices of EGDI are the communications infrastructure, internet services, and human capital indexes. Each of these components has the same weight. Telecommunications Infrastructure Index (TII) means the infrastructure currently present and required for citizens to participate in

e-government; the Online Services Index (OSI) measures the competence and willingness of government, provides services, and communicates electronically with clauses. Lastly, the Human Capital Index (HCI) measures how well citizens can use e-government services. Judging from the analysis of the EGDI value 2020 calculation study findings, European countries are at the top of the digitalization of e-government and public services (Table 1). 16 European countries are among the top 25 countries ranked in 2020 with the highest EGDI values. The list revealed that the UK, Denmark, Estonia, Finland, Sweden and other countries in the best EGDI reviews (UN, 2023).

Analysis of the individual components of integrated EGDI showed that some countries were marked by the highest online service index values (particularly Estonia, Finland, UK, Austria, and France). The value of HCI is extremely important for Norway, Spain, Lithuania, Slovenia, Poland and Germany. The TII highest values were typical of Denmark, Sweden, Iceland, Switzerland and Malta. According to the results of the 2020 EGDI survey in the rankings, Ukraine squares are ranked with an EGDI value of 0.7119. At the same time, the EGDI value increased by 0.095 (which corresponded to the 82nd place in the 2018 ranking) (Nimko et al., 2024).

Prospects of E-Governance in Promoting Public Accountability in Ukraine

The national digital transformation strategy provides Ukraine with the necessary tools to boost public accountability throughout every area of the nation. E-government fulfils its duties by formulating and implementing policies because of its ability to combine transparency functions with accessible information. Through e-government, the Ukrainian government delivers budget information and develops transparent programs and guidelines to advance accountability systems. Both public transparency practices help increase accountability performance while decreasing corruption (Bertot et al., 2010).

One of Ukraine's biggest challenges is ensuring that technology is used to increase accountability and transparency instead of digitizing existing processes (Li & Dhing, 2020). Experience worldwide shows that e-government initiatives to increase transparency and accountability must meet many requirements, including E-government providing citizens with access to current information about public services and government activities, significantly increasing transparency in many countries. The digital transformation program through e-government serves transparency and accountability needs, although some domains have not yet achieved full implementation (Malodia, Dhir, Mishra, & Bhatti, 2021).

Studies about how e-government influences transparency and accountability need to analyze economic and geographic settings because previous research produced distinct outcomes. Two key objectives drive effectiveness assessments of e-government because they allow scientists to discover better approaches to strengthen delivery methods. Ukraine must thoroughly assess e-government guidelines to determine how technology investments affect public service delivery of accountability and transparency.

3. Methodology

The study adopted analysis of secondary data to understand the topics being studied. The study selected Diia and Prozorro as its crucial case studies due to the importance of the platform as a key e-government project in Ukraine. The study extensively investigated Diia and Prozorro's effects on Ukrainian e-government through multi-method data gathering techniques. The method provides complete knowledge about how these platforms enhance transparency and service effectiveness while improving accountability. The research relied on official documentation as its source of secondary data. The analysis of official digital transformation reports produced by Ukrainian Ministry departments and relevant organizations enabled

Table 1

EGDI analysis countries in Europe with the highest rating and Ukraine

Country	EGDI Rank, 2020	OSI, 2020	HCI, 2020	TII, 2020	EGDI, 2022	EGDI, 2020	EGDI, 2018
Denmark	1	0.9706	0.9588	0.9979	0.9717	0.9758	0.915
Estonia	3	0.9941	0.9266	0.9212	0.9393	0.9473	0.8486
Finland	4	0.9706	0.9549	0.9101	0.9533	0.9452	0.8815
Sweden	6	0.9000	0.9471	0.9625	0.9410	0.9365	0.8882
UK	7	0.9588	0.9292	0.9195	0.9138	0.9358	0.8999
Iceland	12	0.7941	0.9525	0.9838	0.9410	0.9101	0.8757
Norway	13	0.8765	0.9392	0.9034	0.8879	0.9064	0.8557
Austria	15	0.9471	0.9032	0.8240	0.8801	0.8914	0.8301
Switzerland	16	0.8294	0.8946	0.9482	0.8752	0.8907	0.852
Spain	17	0.8882	0.8989	0.8531	0.8842	0.8801	0.8415
France	19	0.8824	0.8612	0.8719	0.8832	0.8718	0.879
Lithuania	20	0.8529	0.9218	0.8249	0.8745	0.8665	0.7534
Malta	22	0.8118	0.8290	0.9232	0.8943	0.8547	0.8011
Slovenia	23	0.8529	0.9256	0.7853	0.8781	0.8546	0.7714
Poland	24	0.8588	0.9001	0.8005	0.8437	0.8531	0.7926
Germany	25	0.7353	0.9362	0.8856	0.8770	0.8524	0.8765
Ukraine	69	0.6824	0.8591	0.5942	0.8029	0.7119	0.6165

Source: as cited in Nimko et al. (2024)

the research to grasp implementation processes alongside the political structures of Diia and Prozorro. The study mentioned data restrictions as potential obstacles to its research scope, although it took measures to address these shortcomings. The study applied multiple data sources through triangulation, including secondary reports and previous studies, because it was difficult to adopt primary data records. The outcome becomes more precise as well as more dependable.

4. Discussion and Results

Discussion of results – Diia Portal

Global delivery of public services has been changed deeply with the development of digital governance, with Ukraine setting the standard on the Diia portal. A unified digital platform providing access to many public services has been introduced as part of Ukraine's digital transformation agenda. In this literature summary, a study of related research and reports on e-government, digital public services, and anti-corruption measures examines how the Diia portal improves accountability and transparency in the delivery of public services. By reducing bureaucratic inefficiency and increasing civic participation, digital platforms can improve their obligations of transparency and accountability according to the e-government framework (Heeks, 2016; Bannister & Connolly, 2011). Accountability ensures that government measures are followed up, officials are responsible for their decisions, and transparency related to citizens' access to government information (Meijer, 2015; Clarke, 2020). Diia meets these goals by providing digital public services in an efficient, verifiable and citizen centric way.

Despite its success, the Diia portal still has issues that could hinder the promotion of accountability and openness. Research on digital governments in other countries shows that infrastructure limitations, cybersecurity issues, and digital literacy flaws can limit technology adoption. Additionally, concerns emerging regarding government surveillance and data protection oversight have raised data protection, demanding robust legislative framework conditions and cybersecurity authorities (UNESCO, 2023). The Diia portal is an important step toward improving accountability and openness in delivering public services in Ukraine. Diia responds to international best practices of e-government and anti-corruption initiatives by digitising procedures, automating documentation and including citizen opinions. However, solutions to problems with cybersecurity, infrastructure and digital literacy are extremely important for long-term viability. The main objective of future research should be to assess Diia's impact on corruption reduction and its possible replication in the context of various governance.

Discussion of results – Prozorro System

According to the OECD (2016), public procurement is an important aspect of government that is particularly susceptible to corruption, inefficiency and poor management. Prozorro is an electronic procurement system implemented in Ukraine to solve these problems and increase accountability, efficiency and transparency. The open-source, technology-based process that leads to "transparency" in Ukraine operates the "everyone sees everything" principle, ensuring that sourcing procedures are openly available. Different studies about digital governance and anti-corruption frameworks for open contracts provide the database for research analysis, which examines how Prozorro affects public procurement standards and accountability. E-procurement platforms achieve corruption reduction through minimal human involvement features in combination with high-quality competition features and data-sharing capability mechanisms in line with digital governance principles described by Lindstedt and Naurin (2010) and Bertot et al. (2010). The Open Contracting Data Standard (OCDS) defined specifications enable real procurement records to become digitally accessible through systems, as stated by the World Bank (2019). Total verification of governmental transparency becomes possible through unrestricted access given to both public bodies and regulatory entities for complete data access.

By promoting accountability, openness and competition, the Prozorro system has revolutionized public procurement in Ukraine. The differences between the Diia and Prozorro as e-governance tools in Ukraine are as follows:

Economic benefits of associated with the implementation of Diia and Prozorro System in Ukraine

Critical steps to openness and cost efficiency are presented by the digital transformation of state services via Prozorro (Ukrainian e-procurement system) and Diia (national e-government platform). These digital solutions seek to improve service delivery, reduce corruption and reduce bureaucratic inefficiency. This section deals with financial benefits and the difficulties in implementing them in Ukraine. Process optimization and reduced government spending through waste are some of the biggest economic benefits of Diia and Prozorro. Prozorro has significantly reduced procurement costs by increasing competition and preventing overpricing in government contracts. According to

Table 2

Differences between Diia and Prozorro in Ukraine

№	Feature	Diia	Prozorro
1	Purpose	Provides digitalized services to the citizens	Facilitates transparent public procurement and tendering process
2	Target users	Citizens, business owners and private entities	Government institutions, suppliers and contractors
3	Functionality	Access to personal documents, digitalized signatures and business registration	Open tender listings, bidding, procurement monitoring and analytics
4	Focus Area	Service delivery and digital identity	Procurement and anti-corruption
5	Transparency role	Increases efficiency and convenience in accessing government services	Ensures fair competition and prevents corruption in government procurement

a 2019 World Bank survey, Ukraine saved over US$1 billion in procurement costs in the first few years after using Prozorro. Diia reduced management costs by digitizing public services and eliminating the need for physical offices, paperwork and HR periods (OECD, 2022).

Digital platforms greatly increase the speed and accessibility of state services, increasing overall efficiency. Simplifying bids, shorter contract processing periods, and limiting human intervention have led to Prozorro's significantly reduced procurement costs by increasing competition, preventing overpricing in government contracts, and increasing procurement efficiency (OECD, 2020). Prozorro accelerates contract prices by 40%, allowing projects to run faster than previous long-term and irregular procurement processes (Transparency International, 2022). By eliminating administrative roads for access to state services, Diia increases productivity. Digitalization using Diia reduced administrative processing time by 50–70% and benefited businesses and individuals equally after (UNDP, 2023). Although companies and individual applicants were previously affected by document review and approval delays, the interpretation of digital IDs and digital signatures accelerated these processes (OECD, 2021). Reducing corruption by removing discretionary and openness and promoting public oversight are the main goals of both systems. Prozorro has significantly reduced procurement costs by increasing competition and preventing overpricing in government contracts, ensuring that every procurement transaction is openly transparent by an "everyone sees everything" philosophy.

In government contracts, this significantly reduces price inflation, bidding manipulation and preferences (Fazekas & Tóth, 2016). Digitalizing public services reduces the likelihood of blackmail and bribery due to fewer personal encounters between citizens and government officials (Krasnov & Chernyavska, 2020). According to a study by Transparency International (2022), DIIA reduced informal payments for government services by 40%, while Prozorro reduced the risk of procurement corruption by 30%.

Challenges associated with the implementation of Diia and Prozorro System in Ukraine

Effective use of these platforms is a challenge for seniors and rural residents due to limited internet connections and low levels of digital literacy (OECD, 2022). Government contract participation is limited in certain small and medium-sized businesses due to the technical obstacles in passing Prozorro's bidding procedures (World Bank, 2019). According to Boehm and Olaya (2006), corrupt authorities and powerful interest groups often reject digital reforms that limit the outlook for experimental rents. Some government officials roam the process by distributing contracts in small quantities and try to avoid transparency rules (OECD, 2020). Some situations still include manual interventions that affect the full benefits of digitalization. With so much sensitive data to manage, Prozorro and DIIA are often targets for cyberattacks. Cyberattacks seriously threaten government digital infrastructure, resulting in increased risks due to Ukrainian conflicts (UNDP, 2023). Strong cybersecurity measures are needed to balance data protection and the public's effective balance in viewing purchase documents (European Bank of Reconstruction, 2021). Without legal enforcement measures, the impact of digital reform would be reduced. Even if Prozorro reveals corruption, legal procedures are being taken against fraudulent contractors (Klitgaard, 2015). There is a gap in the harmony of digital services with existing legal frameworks, leading to regulatory disputes in some sectors (OECD, 2021).

Prozorro and Diia have created significant economic benefits, particularly in cost reduction, efficiency and corruption reduction. These platforms have improved public sector procurement and service processes through digital technology, bureaucratic bottleneck removal, and more openness. Optimizing its effectiveness requires solving issues relating to cyber risk, bureaucratic opposition, enforcement gaps, and accessibility. Future research should address best practices in other digital governance models and find strategies to improve institutional accountability and cybersecurity.

5. Conclusion. Ukraine's public service procurement and regulatory structure received modernization through two digital governance systems known as Diia and Prozorro. Through these systems, the government accomplished key successes in improving government business efficiency while increasing business efficiency, transparency, and openness. Public services digitalization alongside digital procurement procedures has allowed Ukraine to build accessible public administration and decreased corruption rates, thereby strengthening institutional confidence.

The Prozorro system requires standardized procurement operations sustained through the improved legal framework to maintain accountability across the platform. The two systems operate to drive operational improvements and streamline methods, which reduce state expenditure. Ukraine achieved better economic stability by eliminating corruption since it reduced procurement costs, eliminated management tasks, and eliminated informal expenses. The corporate competition grows with digital technology because organizations benefit from equal access and unbiased handling of office contract negotiation procedures. Ukraine's modern governance system is an example showing other countries how to boost their public sector accountability through transparent processes and accelerated operations.

References:

1. Bannister, F., & Connolly, R. (2011). The Trouble with Transparency: A Critical Review of Openness in e-Government. *Policy & Internet*, *3*(1), 158–187. https://doi.org/10.2202/1944-2866.1076
2. Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, *27*(3), 264–271. https://doi.org/10.1016/j.giq.2010.03.001
3. Boehm, F., & Olaya, J. (2006). Corruption in public contracting auctions: The role of transparency in bidding processes. *Annals of Public and Cooperative Economics*, *77*(4), 431–452. doi: 10.1111/j.1467-8292.2006.00314.x

4. Clarke, A. (2020). Digital government units: what are they, and what do they mean for digital era public management renewal? *International Public Management Journal : IPMJ*, *23*(3), 358–379. doi: 10.1080/10967494.2019.1686447
5. Cost of corruption – GIACC. (2024, April 8). Retrieved April 14, 2025, from Giaccentre.org website: https://giaccentre.org/the-cost-of-corruption/
6. Cruz Romero, R. (2023). Defining transparency: A functional approach. *JeDEM – eJournal of eDemocracy and Open Government*, *15*(1), 219–242. doi: 10.29379/jedem.v15i1.714
7. Daud, S. H., Mzin, M., Shamsuddin, W. F. W., & Othman, K. (2020). Implementation of e-government 2.0 In Malaysian ministries: Towards a conceptual research framework. *International Journal of Business and Economy*, *2*(4), 115–130. https://myjms.mohe.gov.my/index.php/ijbec/article/view/11668
8. Dwangu, A. M., & Mahlangu, V. P. (2021). Accountability in the financial management practices of school principals. *International Journal of Educational Management*, *35*(7), 1504–1524. doi: 10.1108/ijem-06-2021-0243
9. European Commission. (2023). *Commission staff working document Ukraine 2023 report accompanying the document communication from the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions communications on EU enlargement policy SWD*. Brussels: European Union. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023SC0699
10. Heeks, R. (2016). *Implementing and managing e-government*. Sage Publications. https://sk.sagepub.com/book/mono/implementing-and-managing-egovernment/toc
11. Ishengoma, F., & Shao, D. (2025). A framework for aligning e-government initiatives with the sustainable development goals. *Journal of Innovative Digital Transformation*, *2*(1), 73–89. doi:10.1108/jidt-09-2024-0025
12. Kalitenko, O. (2023, June 13). *Anti-corruption reform in Ukraine after Russia's full-scale invasion* (SCEEUS Report No. 13). Stockholm Centre for Eastern European Studies. https://sceeus.se/en/publications/anti-corruption-reform-in-ukraine-after-russias-full-scale-invasion/
13. Kholid, M. N., & Sari, D. N. (2022). Determinant of citizens' acceptance of E-government: Examining semi-online tax filing system in Indonesia. *Webology*, *19*(1), 2104–2121. doi: 10.14704/web/v19i1/web19142
14. Klitgaard, R. (2015). *Addressing corruption through better governance and transparency*. World Bank Policy Paper.
15. Kumar, R., Sachan, A., & Mukherjee, A. (2025). Adoption of e-government services at different maturity levels: a qualitative study in India. *Digital Policy Regulation and Governance*, *25*(1), 15–39. doi: 10.1108/dprg-09-2021-0116
16. Lennon, O. (2023). Why the west should localize anti-corruption efforts in Ukraine. Retrieved April 14, 2025, from PONARS Eurasia website: https://www.ponarseurasia.org/why-the-west-should-localize-anti-corruption-efforts-in-ukraine/
17. Li, X., & Ding, Y. (2020). Holistic governance for sustainable public services: Reshaping government-enterprise relationships in china's digital government context. *International Journal of Environmental Research and Public Health*, *17*(5), 1778. doi: 10.3390/ijerph17051778
18. Lindstedt, C., & Naurin, D. (2010). Transparency is not Enough: Making Transparency Effective in Reducing Corruption. *International Political Science Review*, *31*(3), 301–322. doi: 10.1177/0192512110377602
19. Malodia, S., Dhir, A., Mishra, M., & Bhatti, Z. A. (2021). Future of e-Government: An integrated conceptual framework. *Technological Forecasting and Social Change*, *173*(121102), 121102. doi: 10.1016/j.techfore.2021.121102
20. Meijer, A. (2015). Government transparency in historical perspective: From the ancient regime to open data in the Netherlands. *International Journal of Public Administration*, *38*(3), 189–199. doi: 10.1080/01900692.2014.934837
21. Milakovich, M. E. (2021). The transition from electronic government to smart digital governance. In *Digital Governance* (pp. 26–54). New York: Routledge. https://doi.org/10.4324/9781003215875-2
22. National Agency on Corruption Prevention. (2020). *Anti-corruption strategy for 2021–2025*. https://www.nazk.gov.ua/assets/eu-strategy/Anti-corruption-Strategy-for-2021-2025.pdf
23. Nimko, O., Ohorodnyk, V., Dankevych, V., & Doronina, I. (2024). E-governance and corruption perception: Global insights and Ukraine's context during war and displacement. *Pakistan Journal of Criminology*, (16.3), 223–244. doi: 10.62271/pjc.16.3.223.244
24. O'Regan, G. (2021). *A brief history of computing*. Springer Nature.
25. Padua, M. G. (2020). Revealing late 20th century hybrid modernity. In *Hybrid Modernity* (pp. 105–195). Abingdon, Oxon; New York, NY: Routledge, 2020. Routledge. https://doi.org/10.4324/9781315587684-5
26. Rachmawati, T., & Dwi Fitriyanti, K. (2021). Analysis of the E-government initiative at local government level in Bandung city, Indonesia. *Jurnal Ilmu Sosial Dan Ilmu Politik*, *25*(1), 62-80. doi: 10.22146/jsp.58966
27. Ramzy, M., & Ibrahim, B. (2024). The evolution of e-government research over two decades: applying bibliometrics and science mapping analysis. *Library Hi Tech*, *42*(1), 227–260. doi: 10.1108/lht-02-2022-0100
28. Sabani, A. (2021). Investigating the influence of transparency on the adoption of e-Government in Indonesia. *Journal of Science and Technology Policy Management*, *12*(2), 236–255. doi: 10.1108/jstpm-03-2020-0046
29. Shava, E., & Vyas-Doorgapersad, S. (2023). Inclusive participation in information and communication technologies (ICTs) processes for smart services in the city of Johannesburg. *Insights into Regional Development*, *5*(1), 26–40. doi: 10.9770/ird.2023.5.1(2)
30. Transparency International. (2024). *Corruption Perceptions Index 2024*. https://www.transparency.org/en/cpi/2024
31. United Nations. (2020, September 24). Hundreds of billions of dollars lost to governments due to financial crime that could be spent on social development. https://news.un.org/ru/story/2020/09/1386622
32. Vuorenmaa, E. (2024). From distrust to trust: Balancing between forcing and fostering management control systems in a hostile cross-border post-acquisition integration. *Management Accounting Research*, *64*(100889), 100889. doi:10.1016/j.mar.2024.100889
33. World Bank. (2019). *Ukraine's e-procurement reform and its impact on corruption reduction*. Washington, D.C: World Bank.