

APPROACHES TO ASSESSING THE PROGRESS OF REGIONS AND LOCAL COMMUNITIES' DIGITAL TRANSFORMATION: METHODOLOGICAL FRAMEWORK AND RESULTS OF THE 2022–2024 PILOT

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INTRODUCTION

In the context of the global digital transformation of society, the role of digital technologies and digital solutions at all levels by all public administration entities is becoming widespread¹. By implementing the large-scale programme “State in a Smartphone”, Ukraine has moved closer to the leading countries in the development of digital governance over the past five years². One of the priorities of the Ministry of Digital Transformation of Ukraine is the digitalisation of the regions and the digital transformation of territorial communities³. Despite the martial law, Ukrainian local communities proceed with digital transformation, in particular through the implementation of regional programmes⁴.

A considerable range of domestic scholars have paid attention to the study of digital transformation of public administration, most of whom have studied numerous practices of foreign countries and the positive experience of Ukraine in recent years: Y. Borodin, Y. Borysenko, H. Demoshenko, J. Denisyuk, N. Larina, O. Karpenko, N. Korchak, S. Kvitka, T. Mamatova, O. Matveieva, V. Namestnik, N. Novichenko, N. Piskokha, A. Rachynskyi, A. Semenchenko, S. Chukut etc. More specifically, on studying: digital transformation as a modern trend in the periodic cycle of society's

¹ Бородин Є., Піскоха Н., Демошенко Г. Проблеми і переваги цифровізації місцевого самоврядування. *Аспекти публічного управління*. 2021. Т. 9. № 4. С. 95–103. DOI: <https://doi.org/10.15421/152141>.

² Маматова Т., Борисенко Ю. Цифрове врядування: сучасні світові тренди та особливості розвитку в Україні. *Публічне управління та місцеве самоврядування*. 2024. № 2. С. 46–53. DOI: <https://doi.org/10.32782/2414-4436/2024-2-6>

³ Цифрова трансформація регіонів України. *Цифрова громада : національний вебпортал*. URL: <https://hromada.gov.ua/>

⁴ Matveieva O., Mamatova T., Borodin Y., Gustafsson M. S., Wihlborg E., Kvitka S. Digital Government in Conditions of War: Governance Challenges and Revitalized Collaboration between Local Authorities and Civil Society in Provision of Public Services in Ukraine. *Proceedings of the 57th Hawaii International Conference on System Sciences (HICSS-57)*. 2024. P. 2003_2011. URL: <https://hdl.handle.net/10125/106628>.

development⁵; advanced trends of digital transformation of public administration⁶; specific processes and practices of digital governance⁷; scientific approaches to the study of digital transformation and e-governance in public administration and management⁸; problems and prospects of organising the provision of electronic services in Ukraine in times of war⁹; governance challenges and revitalized collaboration between local authorities and civil society in provision of public services in Ukraine¹⁰.

The results of the analysis of publications, international and national regulatory documents show, on the one hand, the complexity and multidimensionality of public administration processes in the context of digital transformation, as well as numerous challenges and problems in this area at the level of territorial communities, and, on the other hand, significant theoretical and practical developments that can be successfully adapted by public administration bodies to the conditions of their own activities, in particular, in the context of war and post-war reconstruction.

As it was stated in the justification of the relevance of the study of public administration processes related to the local community's digital transformation, "there is a contradiction between the urgent need to improve public administration for the local communities' digital transformation in Ukraine under the martial law regime and in the postwar period, the formation, revision and implementation of relevant policies and public initiatives, and the lack of conceptual and methodological support for these processes"¹¹.

⁵ Квітка С. Цифрові трансформації як сучасний тренд періодичного циклу розвитку суспільства. *Збірник наукових праць Національної академії державного управління при Президентові України*. 2020. Спецвипуск. С. 131–134. DOI: <http://doi.org/10.36.030/2664-3618-2020-si-131-134>.

⁶ Квітка С., Новіченко Н., Гусаревич Н., Піскоха Н., Бардах О., Демощенко Г. Перспективні напрямки цифрової трансформації публічного управління. *Аспекти публічного управління*. 2020. Т. 8. № 4. С. 129–146. URL: <https://doi.org/10.15421/152087>.

⁷ *Цифрове врядування* : монографія / О. В. Карпенко, Ж. З. Денисюк, В. В. Наместнік [та ін.] ; за ред. О. В. Карпенка. Київ : ІДЕЯ ПРИНТ, 2020. 336 с.

⁸ Корчак Н., Рачинський А., Ларіна Н. Цифрова трансформація та електронне врядування: наукові підходи дослідження в сфері публічного управління та адміністрування. *Аспекти публічного управління*. 2023. Т. 11. № 3. С. 43–49. DOI: <https://doi.org/10.15421/152334>.

⁹ Чукут С., Карпенко Є. Організація надання електронних послуг в Україні в умовах війни. *Публічне управління та регіональний розвиток*. 2023. Вип. 20. С. 589–613. DOI: <https://doi.org/10.34132/pard2023.20.14>.

¹⁰ Matveieva O., Mamatova T., Borodin Y., Gustafsson M. S., Wihlborg E., Kvitka S. Digital Government in Conditions of War: Governance Challenges and Revitalized Collaboration between Local Authorities and Civil Society in Provision of Public Services in Ukraine. *Proceedings of the 57th Hawaii International Conference on System Sciences (HICSS-57)*. 2024. P. 2003_2011. URL: <https://hdl.handle.net/10125/106628>.

¹¹ Бородин Є. І., Начовний І. І. Актуальність дослідження процесів публічного управління у сфері цифрової трансформації територіальної громади. *II Міжнародний форум: безпечна, комфортна та спроможна територіальна громада : матеріали наук.* - 440

1. The vision of the territorial communities' digital transformation

Digitalisation is essential for the provision of quality medical, educational, social, administrative and other public services, access to mobile communications and fixed-line internet, which is especially important in times of war, as well as improving cybersecurity and the functioning of critical infrastructure in general¹². We also emphasize that the vision of the territorial communities' digital transformation within the framework of the Ministry of Digital Transformation of Ukraine's priority area of regional digitalization is formulated as follows: «each territorial community is able to independently guide the development of digitalization processes, and community leaders are visionaries and drivers of the relevant processes»¹³.

The main advantages of digitalising management processes at the level of local communities include the following:

- developing a basic digital infrastructure to improve access to the Internet, cloud storage and data centres, ensuring data exchange between different applications (APIs);
- creating a system of countering cyber threats in the community;
- reducing the digital divide between citizens and authorities and between rural and urban areas through the development of state and local e-services;
- improving the effectiveness of planning and implementation of local development programmes and projects and the quality of public administration decisions based on open data and analytics;
- developing the professional competence of local community residents as the basis for their economic and social well-being, increasing their ability to resist disinformation and ‘online dangers’ by raising the level of digital literacy;
- developing local small and medium-sized businesses based on digital technologies; ensuring transparency and proper communication at the local level¹⁴.

The aspects mentioned for the local level reflect global trends. Thus, describing the state of e-governance in the world, the authors of the 2022 UN E-Government Survey note that digital technologies are increasingly blurring the boundaries between the physical, digital and biological spheres and are

практ. конф., м. Дніпро, 16–18 жовтня 2024 р. Дніпро : НТУ «Дніпровська політехніка», 2024. С. 180–182. URL: <https://science.nmu.org.ua/ua/conferences/Forum/Zbirnyk2024.pdf>

¹² Індекс цифрової трансформації регіонів України підсумки 2024 року. Міністерство цифрової трансформації України, 2024. URL: <https://cms.thedigital.gov.ua/storage/uploads/files/page/community/reports/ІНДЕКС%202024%202%201.pdf>

¹³ Бачення цифрової трансформації громад. *Цифрова громада : національний вебпортал*. URL: <https://hromada.gov.ua/database/transformation>

¹⁴ Цифрова трансформація регіонів України. *Цифрова громада : національний вебпортал*. URL: <https://hromada.gov.ua/>

rapidly changing the way people live, work and communicate¹⁵. The public sector is a prime example of how, in terms of policies, institutions, strategies and tools, there is no longer a clear distinction or separation between traditional government and e-government. With the development of digital government, public administration and governance around the world have undergone irreversible changes, both structurally and in terms of the dynamics of the relationship between governments and the people they serve.

The global average E-Government Development Index (EGDI) rose to 0.6102 in 2022, up from 0.5988 in 2020¹⁶. This is largely due to the progress made in strengthening telecommunications infrastructure. The EGDI value for Ukraine in 2022 was 0.8029, ranking 46th out of 193 countries, and the EPART e-inclusion index was 0.6023, ranking 57th. The UN E-governance Knowledgebase resource allows visualising a comparison of Ukraine and the leading countries in terms of EGDI in 2023: Denmark is the global and regional leader (0.9717), Poland is the subregional leader (0.8437), and tracing the dynamics of the EGDI value and ranking for 2003–2022¹⁷.

In 2024, Ukraine demonstrated a breakthrough increase in the E-Government Development Index, rising by 16 points to 30th place in the global ranking. The E-participation and Content Provision sub-indices of the online services index reached the maximum value of 1. In particular, in the E-participation sub-index in 2024, Ukraine ranked first in the ranking and is now a sub-regional, regional and global leader¹⁸.

This breakthrough success is the basis for reform processes at both the central (implementation of the large-scale national project «State in a Smartphone») and regional and local levels of public administration – digital transformation of public administration in territorial communities with methodological and organizational support from specialized departments of regional state (military) administrations. This statement is supported by the results of the assessment by two indices: The Regional Digital Transformation Index and The Ukrainian local community's digital transformation index¹⁹.

¹⁵ UN global e-government survey 2022: The Future of Digital Government. Department of Economic and Social Affairs. United Nations : N.Y., 2022. 311 p. URL: <https://desapublications.un.org/sites/default/files/publications/2022-09/Web%20version%20E-Government%202022.pdf>.

¹⁶ Ibid.

¹⁷ Country Selector. Ukraine. *UN E-governanment Knowledgebase : web-site*. 2024. URL: <https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/180-Ukraine>.

¹⁸ UN global e-government survey 2024: Accelerating Digital Transformation for Sustainable Development. N.Y.: United Nations, Department of Economic and Social Affairs, 2024. XXIII, 180 p. URL: <https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2024>.

¹⁹ Цифрова трансформація регіонів України. *Цифрова громада : національний вебпортал*. URL: <https://hromada.gov.ua/>.

2. The Regional Digital Transformation Index

It is generally accepted that digitalisation is necessary to provide quality healthcare, education, social, administrative and other public services, ensure access to mobile and fixed-line internet, which is especially important in times of war, and improve cybersecurity and the functioning of critical infrastructure in general. The Ministry of Digital Transformation states that regions and local communities «serve as key players in the implementation of digital and technological changes, forming a new decade of digital Ukraine, making it competitive in the international arena»²⁰.

To accelerate changes on the ground, in 2020 the Ministry of Digital Transformation launched new positions in regional state (military) administrations – deputy heads of digital development, digital transformation and digitalisation (Chief Digital Transformation Officer, CDTO). At the local level, CDTOs are expected to lead digital transformation in all 14,000 territorial communities of Ukraine²¹.

The Regional Digital Transformation Index (RDTI) measures the level of regions' digital development, the effectiveness of CDTOs and digital teams of the regional authorities. The structure of The Regional Digital Transformation Index with changes by 2022-2024 years is presented in table 1.

Table 1

The structure of The Regional Digital Transformation Index

Subindex	Indicator (number of metrics), 2024	2022	2023	2024
		%		
Institutional capacity	Digital transformation strategy for the region (3)			
	Regional informatisation programme (4)			
	Structural unit for digital transformation (2)	10	10	5
	Supporting organisations (2) Digital communities (3)			
Internet development	Setting up open Wi-Fi zones on the site (5)	20	20	5
Development of administrative service centres	ASC network development (4)			
	Amount of services in ASCs (5)			
	ASC automation (3)	20	20	5
	Barrier-free accessibility and ASC modernisation (1)			

²⁰ Індекс цифрової трансформації регіонів України підсумки 2024 року. Міністерство цифрової трансформації України, 2024. URL: <https://cms.thedigital.gov.ua/storage/uploads/files/page/community/reports/ІНДЕКС%202024%202%201.pdf>.

²¹ Ingram G., Vora P. *Ukraine: Digital resilience in a time of war*. Center for Sustainable Development at Brookings, January 30, 2024. 32 p. URL: <https://www.brookings.edu/articles/ukraine-digital-resilience-in-a-time-of-war/>.

Paperless Mode	E-document management (1) Action.QR / sharing / official / validation by ARI (5) Open data (4) Digitisation of registers (10)	10	10	5
Digital education	Engaging the community in digital skill's development programmes (1) E-journals in general secondary education institutions (1)	5	5	5
Regional business card	Regional State Administration website (2) Address register (3) Diia.Business (1)	5	5	5
Penetration of basic electronic services	Inventory of real estate assets (2) Digitalisation of the social sector (4)	20	10	5
Sectoral digital transformation	Information security and critical infrastructure resilience (5) Healthcare (1) Civil defence (2) E-democracy (4)	10	20	5
Individual CDTO projects	Mandatory projects (3) Compulsory projects (1)	–	–	60
In total	Number of indicators: 27. Number of metrics: 82	0,651	0.632	0,497

Source: Author based on materials^{22,23,24}

The average RDTI score in 2022 was 0.651 out of a possible 1. The highest values were observed in the sub-indices Development of Administrative Services Centres (0.771), Paperless Mode (0.691) and Internet Development (0.406). The lowest value was for the Digital Education sub-index. The latter fact revealed the need to create a digitalisation infrastructure in secondary education institutions and programmes to develop digital skills among citizens. The development of the Diia.Osvita portal is aimed at solving this problem²⁵.

Diia.Education is the next stage in the evolution of the Diia.Digital Education project. It was launched in 2020 and focused on digital literacy and digital skills. The 2023 survey found that 59.6 % of Ukrainians have at least basic digital literacy. Now, the major challenge for Diia.Osvita is to make a

²² Індекс цифрової трансформації регіонів України: підсумки 2022 року. Міністерство цифрової трансформації України, 2022. URL: https://drive.google.com/file/d/1a-tOr16Ahzl_BSk1M7bif4y3CRlfmFRC/view.

²³ Індекс цифрової трансформації регіонів України: підсумки 2023 року. Міністерство цифрової трансформації України, 2023. URL: https://cms.thedigital.gov.ua/storage/uploads/files/page/community/reports/Індекс_цифрової_трансформації_регіонів_України_2023_compressed.pdf.

²⁴ Індекс цифрової трансформації регіонів України підсумки 2024 року. Міністерство цифрової трансформації України, 2024. URL: <https://cms.thedigital.gov.ua/storage/uploads/files/page/community/reports/ІНДЕКС%202024%202%201.pdf>.

²⁵ Дія.Освіта : веб-портал Міністерства цифрової трансформації України. URL: <https://osvita.diia.gov.ua/>.

breakthrough not only in digital knowledge, but also in the skills and abilities relevant in the modern world²⁶.

In the 2023 survey, the average score of the Index was 0.632 out of a possible 1. The highest scores are observed in such sub-indices as Paperless Regime (0.697) and Institutional Capacity (0.778), Paperless Mode (0.697), Institutional Capacity (0.678), and Penetration of Basic eServices (0.666). The lowest score was achieved in the Sectoral Digital Transformation sub-index (0.560), indicating the need to strengthen work in the areas of cybersecurity, healthcare, and civil protection²⁷.

In 2024, the average score for the Digital Transformation Index was 0.497 out of a possible 1²⁸. The highest scores were observed in such sub-indices as Penetration of Basic E-Services (0.759), Institutional Capacity (0.687) and Internet Development (0.686). The lowest score was achieved in the sub-index Paperless Mode (0.421), which indicates the need to enhance the efforts in this area next year.

The indicators by sub-indices may vary over the years depending on the problem situation. Thus, in 2023, during the war, there was a need to connect shelters to high-speed Internet and organise Wi-Fi access in social care facilities, including kindergartens, secondary education institutions and hospitals. Therefore, a corresponding indicator was added to the Internet Development sub-index. The average value of the sub-index was 0.632 out of a possible 1. As of the end of 2023, three regions were leaders in this sub-index: Kharkiv (0.926), Poltava (0.917), and Ternopil (0.916). In general, Internet access was provided on average to 71.0 % of shelters in secondary education institutions, 67.0 % of shelters in preschool education institutions and 57.0 % of healthcare institutions²⁹.

From 2024 RDTI includes 9 sub-indices covering key areas of digital transformation: Internet development; Development of administrative service centres; Paperless Mode; Digital education; Regional business card; Penetration of basic electronic services; Sectoral digital transformation;

²⁶ Про проєкт. Дія.Освіта : веб-портал Міністерства цифрової трансформації України. URL: <https://osvita.diiia.gov.ua/about>.

²⁷ Індекс цифрової трансформації регіонів України: підсумки 2023 року. Міністерство цифрової трансформації України, 2023. URL: https://cms.thedigital.gov.ua/storage/uploads/files/page/community/reports/Індекс_цифрової_трансформації_регіонів_України_2023_compressed.pdf.

²⁸ Індекс цифрової трансформації регіонів України підсумки 2024 року. Міністерство цифрової трансформації України, 2024. URL: <https://cms.thedigital.gov.ua/storage/uploads/files/page/community/reports/ІНДЕКС%202024%202%201.pdf>.

²⁹ Індекс цифрової трансформації регіонів України: підсумки 2023 року. Міністерство цифрової трансформації України, 2023. URL: https://cms.thedigital.gov.ua/storage/uploads/files/page/community/reports/Індекс_цифрової_трансформації_регіонів_України_2023_compressed.pdf.

Individual CDTO projects. The sub-indices are detailed by 27 indicators and 82 metrics to measure the level of digitalisation in the regions³⁰.

In 2024, the leaders in digital transformation were Lviv (0.850), Dnipro (0.844), and Odesa (0.804) regions. The highest results were achieved in three sub-indices: Penetration of basic electronic services – the best result in 2024 (0.759); Institutional capacity – (0.687); Internet development – (0.686)³¹.

Below are the key achievements in the relevant areas:

- Internet development (Wi-Fi zones have been set up in 9,600 schools, 5,432 libraries, 4 124 centers for administrative services' provision and 1,152 social security departments);

- Administrative services centers, ASC (the number of full-ASC increased by 140 %; 1 010 ASC are connected to a backup power supply for uninterrupted operation);

- Paperless mode (electronic document management implemented in 690 hromadas, +70 % by 2023);

- Digital education (2.4 million users registered on the Diia.Osvita platform); Sectoral digital transformation (17 cybersecurity, 15 defence and 13 environmental projects implemented in the regions).

The main milestones in 2024: for the first time, individual projects were taken into account, which allows the CDTO of the regional state (military) administrations to set priorities for the digital transformation of the regions. 125 projects were implemented in a year – some have already been scaled up to other regions. An example of scaling: Training centres for unmanned aerial vehicles operators have become a national project.

3. The Ukrainian Local Community's Digital Transformation Index

The Ukrainian local community's digital transformation index (TCDTI) – a calculated value, which is defined as the result of digital transformation of local communities and characterizes the dynamics of its development according to predefined parameters³². The index is a measurement and monitoring tool to assess the current level of digital transformation in the local communities of Ukraine based on the priorities of Ukraine's digital development, and allows to determine the systematic implementation of e-government, e-commerce, e-democracy, etc.

³⁰ Індекс цифрової трансформації регіонів України підсумки 2024 року. Міністерство цифрової трансформації України, 2024. URL: <https://cms.thedigital.gov.ua/storage/uploads/files/page/community/reports/ІНДЕКС%202024%202%201.pdf>

³¹ The same.

³² Індекс цифрової трансформації територіальних громад України. Перше пілотне вимірювання на основі самооцінки ОМС. *Цифрова громада : національний вебпортал*. URL: <https://hromada.gov.ua/index>.

The structure of the TCDTI is divided into five groups of indicators, which differ for the Basic and Extended types of the Index: The Basic TCDTI is for small and medium-sized communities; the Extended TCDTI for large and large communities:

1. Digital economy (capacity to contribute to IT ecosystem development within the community, 7 (Basic)/9 (Extended) indicators, 10/15 % group weight in TCDTI).

2. Development of digital skills of the community residents (raising the level of digital literacy, supporting those who wish to develop in the IT sector, 3/3, 25/20 %).

3. Digital infrastructure (availability and operation of infrastructure to spread digitalisation and safe transactions, 11/12, 20/25 %).

4. Digitalisation of public services (ensuring the provision of services through digital channels with a high level of convenience, omnichannel, user-friendly, security, etc., 17/24, 20/25 %).

5. Digital transformation of local self-government (support for direct democracy, digitalisation within local self-government authorities, 17/20, 20/15 %)³³.

The results of the TCDTI measurements allow community leaders to assess the level of digitalization development in the community and identify a list of factors that affect the achievement of digital transformation goals. The data can help in making management decisions on the implementation of regional digitalization activities and projects by the authorities. A high position of a community in its ranking category according to the TCDTI can be an argument for attracting investors and business representatives to cooperate with communities. For a pilot measurement in 2023 the 1116 local communities (out of the 1470 that exist in Ukraine) gave the information on their digital transformation³⁴. The data received from local communities is dynamically visualised on the National Digital Community web portal (fig. 1 and fig. 2).

³³ The Territorial Community's Digital Transformation Index in Ukraine Initial measurement methodic of the Index. Ministry of Digital Transformation of Ukraine, URL: <https://backend.hromada.gov.ua/storage/uploads/uploads/report/Report-EN.pdf>.

³⁴ Індекс цифрової трансформації територіальних громад України. Перше пілотне вимірювання на основі самооцінки ОМС. *Цифрова громада : національний вебпортал*. URL: <https://hromada.gov.ua/index>.

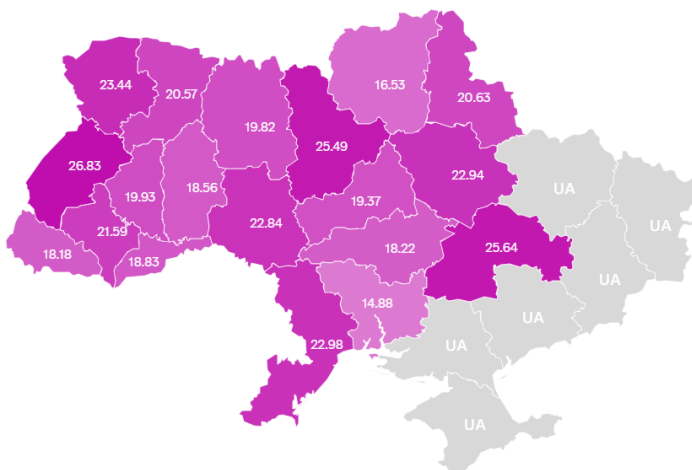


Fig. 1. Total Ukraine, data as of July 2023³⁵

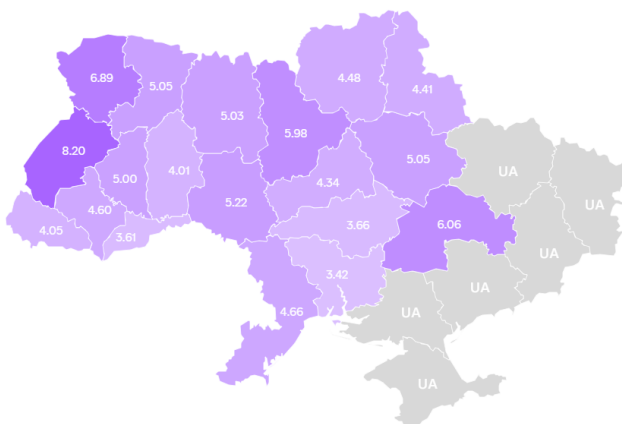


Fig. 2. The TCDTI subindex E-transformation of communities, data as of July 2023

As of the beginning of 2025, the portal only contains data for 2023. In 2024 there was no measurement of the second year, which should have been the basis for determining the annual dynamics of digital development. The author is directly involved in the processes of testing and improving the index, The Ministry of Digital Transformation plans to launch in 2025 a digital community portal, where communities themselves will fill in their indicators

³⁵ Ibid.

and we will see it online. This approach requires, in our opinion, the introduction of a system of verification of data coming from communities to ensure correctness and exclude subjective factors.

The methodology for measuring the TCDTI provides a rating of digital maturity of local communities: the process of measuring the current level of digital maturity of each territorial community, as well as a description of the main stages of digital transformation, including the sequence of implementation of information and communication technologies and priority areas for using relevant community resources³⁶.

The calculation of the TCDTI can be the basis for determining the levels of digital maturity of the local community (table 2).

As Y. Borysenko and T. Mamatova point out, there are approximately 30 different maturity models worldwide nowadays, and new ones are still emerging³⁷. The main objectives of all maturity models are to: assess the current state of the organisation in a particular area; prepare and train the staff involved in the relevant activities; provide an opportunity for continuous improvement of both personal and organisational potential in the relevant area. Implementation of the maturity model enables the organisation to choose an adequate strategy for improving processes in the relevant area, creating a methodological basis for determining the current level of their perfection and identifying problems critical to product quality.

It is important for the development of the digital transformation ecosystem to identify leaders by group and subgroup who will join the exchange of best practices and expertise and further scale up successful experience.

Table 2

The Description of the local community's digital maturity level

The TC digital maturity level	Description	Score range
01 Transformational	Local community is characterized by a high level of digitalisation in all areas covered by the TCDTI, has a strong track record of successfully implemented digitalisation projects in social sphere, ensures sufficient information security and quality indicators	91 to 100 points
02 Proactive	Local community implements a digitalisation programme and actively cooperates with	71 to 90 points

³⁶ The Territorial Community's Digital Transformation Index in Ukraine Initial measurement methodic of the Index. Ministry of Digital Transformation of Ukraine, URL: <https://backend.hromada.gov.ua/storage/uploads/uploads/report/Report-EN.pdf>.

³⁷ Борисенко Ю. В., Маматова Т. В. Підхід до оцінювання зрілості мережових систем місцевого розвитку, орієнтованого на громаду. *Аспекти публічного управління*. 2017. Т. 5, № 11. С. 19–30. DOI: <https://doi.org/10.15421/15201736>.

	residents, promotes digitalisation; demonstrates an appropriate level of publicity and transparency of the local self-government; is attractive for IT investments	
03 Perspective	Local community has average progress in digital transformation in almost all components of the index	51 to 70 points
04 Basic	Local community is preparing organisational and methodological support for digitalisation processes; the local self-government authority is involved in the development of digital skills of residents; there are certain achievements in the quality and accessibility of digital infrastructure	31 to 50 points
05 Starting	Local community has certain achievements in digitalisation of public services, a transformation in the local self-government authority is underway, and the implementation of digital tools in certain areas of public life has begun: education, health, life safety, etc.	0 to 30 points

Source: Author based on materials³⁸

CONCLUSIONS

1. The Ukrainian success in the development of e-governance is based for reform processes at both the central (implementation of the large-scale national project «State in a Smartphone») and regional and local levels of public administration – digital transformation of public administration in territorial communities with methodological and organizational support from specialized departments of regional state (military) administrations. This statement is supported by the results of the assessment by two indices: The Regional Digital Transformation Index and The Ukrainian local community's digital transformation index.

2. The set of The Regional Digital Transformation Index's indicators changes annually as some of them are implemented. In 2024, the approach to evaluating regions was changed. 40 % of the RDTI was made up of national indicators and 60 % of personal projects of the CDTO in the regions. In 2024, only three regions – Dnipro, Lviv and Odesa – are fully fulfilled the second part. Other regions did not achieve significant results in this section due to a large gap between the leaders and the main group.

3. It would be important to investigate the impact of the local level on the RDTI global indicators and find out what communities' needs in their quest

³⁸ The Territorial Community's Digital Transformation Index in Ukraine Initial measurement methodic of the Index. Ministry of Digital Transformation of Ukraine, URL: <https://backend.hromada.gov.ua/storage/uploads/uploads/report/Report-EN.pdf>.

for sustainable service delivery, especially in times of war. Further studies should also focus on finding answers to such research questions: Whether RDTI and TCDTI evaluation methodologies are available? Whether the existing indices provide the necessary data for further analysis and improvement of community activities?

SUMMARY

In 2024, Ukraine demonstrated a breakthrough growth in the E-Governance Development Index, rising by 16 points to 30th place in the global ranking. In particular, in the E-Involvement sub-index, Ukraine ranked first in 2024 and is now a sub-regional, regional and global leader. This breakthrough success is based on the processes that have been unfolding over the past decade as part of the digitalisation reform at the central, regional and local levels of public administration. This conclusion is supported by the results of the assessment of two indices: the digital transformation of regions and the digital transformation of territorial communities in Ukraine. The main advantages of digitalising management processes at the level of local communities include the following: reducing the digital divide between citizens and authorities and between rural and urban areas through the development of state and local e-services; developing the professional competence of local community residents as the basis for their economic and social well-being, increasing their ability to resist disinformation and 'online dangers' by raising the level of digital literacy.

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