Local Self-Government in the Conditions of Digitization: International-Legal Experience

Boris Perezhniak ¹, Larysa Vasylchuk², Tetiana Bevz³, Serhii Pyroha⁴, and Oleksiy Ulianov⁵

Summary
Nowadays more and more attention is paid to digital technologies, digitization, and the digitization of public services in particular. Progressive countries aim to build "digital" governance and a digital economy. In this aspect, the international experience of using digitization in the field of public administration, including in local self-government bodies, plays an important role. Therefore, it is important to analyze the international legal experience of the functioning of local self-government in the conditions of digitization. The purpose of the work is to study the international legal experience of the functioning of local self-government in the conditions of digitization. The object of the study is local self-government in the conditions of digitization through the prism of international legal experience. The subject of the study is social relations that arise, change, and cease during the implementation of digitization in local self-government in Ukraine and foreign countries. The research methodology consists of such methods as the method of philosophical hermeneutics; dialectical method; classification method; comparative method; target method; method of documentary analysis; generalization method. Research results. As a result of the conducted research, the international experience of the functioning of local self-government in conditions of digitization was analyzed. In particular, the impact of digitization processes on the course of the decentralization reform in Ukraine is summarized. Also, from the analysis of international experience, a conclusion was made about the potential possibility of reducing the existing gap in the process of communication between the central government and united territorial communities thanks to the introduction of the latest technologies in the field of administrative services, to stimulate innovative and economic development of regions, attracting the attention of businesses and potential investors, as well as the functioning of more open local authorities with electronic communication tools.

Keywords:
local self-government, digitization, decentralization, information technologies, international cooperation, international experience.

1. Introduction
Information technologies significantly change all social relations: a digital society is emerging. The impact of globalization processes is increasing, and new opportunities for communication and development emerge.

This creates important prerequisites for the effective reform of state institutions and public power at the national and local levels. Whereas digitalization has the effect of improving the efficiency of the authorities' cooperation with citizens, enterprises, and other institutions and reducing the joint costs of time and money.

In general, the word "digitization" means the penetration of digital technologies into all spheres of social life.

Taking into account the fact that in the conditions of the modern informational world, the role and place of the community are rapidly changing, the community (local self-government bodies) faces the question of how to adapt to technological and informational changes and how to effectively use them to accelerate the development of the city (village), its infrastructure and generally raising the standard of living of the population.

Currently, in Ukraine and the world, more and more attention is paid to the provision of services using digital technologies and the implementation of electronic governance. Service activity practices in the field of digitization, decentralization, and monitoring the quality of service provision are rapidly improving. In this aspect, digitization should be interpreted as a process focused on changing paper media to electronic media. At the same time, if we talk about digitization in government bodies, we are talking about the process of forming services for significantly effective management decisions and providing quality services to the population. Of course, there are some challenges when implementing digital tools. However, the problematic aspects can be solved using the already available experience and implementing digital tools, taking into account the system of protection of personal information and the rights to privacy of the citizen, and the implementation of an information and telecommunications system that would guarantee activities in the mode of remote workplaces, as well as provide centralized support services and systems support for citizens when receiving electronic service.

Therefore, digitization is an important factor that affects the transparency, openness, and effectiveness of the work of local self-government bodies. The introduction of the latest technologies, as practice shows, has a positive effect on cooperation between the authorities and the community, allowing making any procedure convenient...
and independent of the human factor. Local self-government bodies are an important socio-political structure on which the lives of people in a particular community depend. Thus, local communities adapt sustainable development to their context. Thanks to the use of digitization tools these communities can improve both the sphere of service provision and the very procedure of decision-making and participation of residents in the life of the community.

International experience shows that the local self-government of various countries already functions with modern technologies. This substantiates the relevance of scientific research on this topic, which is key to the successful and effective completion of the reform of power decentralization.

2. Methodology

To ensure the objectivity, comprehensiveness, and completeness of the study of the international experience of the functioning of local self-government in the conditions of digitization, as well as to obtain scientifically based and reliable results, a system of general scientific and specific scientific methods of cognition was used during the writing of this article.

The method of philosophical hermeneutics integrates knowledge about effectiveness in law – legal, logical, linguistic, psychological, historical, and socio-political. Philosophical hermeneutics is a direction in philosophy that elaborates the theory and practice of interpretation and understanding allowing us to define the key concepts in this article.

Thanks to the use of the dialectical method, the effectiveness of the implementation of digital technologies in the system of local self-government, as well as in combination with other legal phenomena and processes (including digitization), was comprehensively investigated.

The method of qualification was used to carry out the specific characterization of acts of the effectiveness of digitization mechanisms in the system of local self-government.

To find out what is common and different when comparing the experience of different countries, a comparative method was used. Thus, by comparing and distinguishing according to certain features and properties, the peculiarities of the implementation and functioning of digital tools in the implementation of local self-government and public administration, in general, were clarified. In general, the essence of the comparison method is to compare individual social phenomena and processes to identify their similarities and differences. Based on the identified similarity, a hypothetical or sufficiently justified conclusion is made.

The goal and task of digitization of local self-government became clear thanks to the use of the targeted method.

The method of documentary analysis consists in researching the content of documents in the context of theoretical tasks. Thus, the specified method made it possible to outline directions for improving the theoretical foundations and practice of improving the effectiveness of the mechanism for implementing digital tools in local self-government. In the example of digitization of services provided by local authorities, it became clear what advantages and disadvantages such a system include. It is worth noting that during documentary analysis, two methods of studying, analyzing, and processing information obtained from documents were used: a traditional and content analysis. The traditional analysis helped to study the content of documents and works. At the same time, a content analysis made it possible to study the documents in more detail with further interpretation of the results.

During the conducted research, the method of generalization was used, which made it possible to make a transition from individual to general, from less general to more general, to combine subjects according to similar characteristics into a homogeneous group. This method made it possible to penetrate the essence of digitization of local self-government. With the help of the method of generalization, conclusions were formulated regarding the international experience of digitization of local self-government, as well as conclusions were made about problematic issues of such a mechanism in foreign countries and ways of its improvement. This method made it possible to summarize the problematic issues of digitization of public services (services provided by local self-government bodies), as well as solve issues at the local level through the functioning of the digital system (decision-making, decision-making control).

3. Recent Research and Findings

Questions regarding the specifics of the implementation of modern information technologies in local self-government bodies, as well as international legal experience on this issue, were studied by many scholars.

Balinskyi (2020) considered the interaction of decentralization and digitization in his work. In particular, the author concluded that under the conditions of decentralization reform, digitization should take place at all levels and in all areas. At the same time, the main problems that require an urgent solution are the personnel crisis of local self-government and the need to retrain old personnel under new competencies; improvement of the system of providing administrative services, and digitization of most of these processes to create effective interaction between local and central authorities, the development of the public
initiative in the issue of implementation of local finances; the imperfection of the legislative provision of digitization processes in the context of decentralization, the need to expand the current legislative framework; insufficient technical and financial support of the regions due to the inability of local authorities to realize the potential of local authorities and integrate the latest technologies into their activities; corruption and resistance of local authorities, which inhibit development processes at all levels [1].

In the scientific article of Bigniak and Mikhalkchuk, the key principles of reforming public administration in conditions of digitization were revealed and it was concluded that when reforming local self-government, it is necessary to rely on the experience of leading countries, in particular on the experience of the countries of the European Union, which effectively introduce digitization processes into the system of improving the activities of public administration bodies [2].

Dyachenko (2021) considered in more detail the issue of the mechanism of local financial management in conditions of decentralization of power [3].

Havkalova and Lola (2019) reviewed the experience of EU countries regarding democratic decentralization and digitalization of government. The authors concluded that the decentralization of authorities should ensure the democratization of society, combine administrative, political, and fiscal decentralization and provide for the transformation of interaction between state structures and citizens, non-governmental organizations, and businesses. In turn, the integration of Ukraine into the European political, economic, and digital environment requires further democratization of social processes and transformation of public consciousness, which demands new forms of organization of state regulation of all processes in different sectors and at different levels of management [4].

The state of development of digitalization in Ukraine was investigated by Zhosan (2020) [5]. Kalaman and Purtskhvanidze (2020) analyzed the question of ways to build a local community in a digitalized world. The authors note that territorial communities under the pressure of various external and internal factors gradually realize their important role in society. This is also facilitated by the spread of various digital technologies because, to conduct an effective social and economic policy, it is necessary to unite a team of active citizens, local authorities, and the expert community in a network, within which the exchange of material resources, scientific achievements and information will take place [6].

Kolyadenko considered the prerequisites and stages of the formation of the digital economy in Ukraine and the world in his work. (2016). The author's research made it possible to understand how digital tools affect the public sphere [7].

The components of e-democracy in the context of the transition to e-government were considered by Krasnopolska and Miloserdna (2020) [8]. The authors identified three main components of e-democracy: e-voting, e-participation, and public control. The peculiarities of each of them, as well as the global practice of their application, are also analyzed. It was determined that the condition for the effectiveness of the implementation of all components of e-democracy is civic literacy (a set of abilities that make it possible to function in a democratic society, to think critically, and act thoughtfully in conditions of pluralism).

Digitization as a means of increasing the openness, transparency, and efficiency of the activities of state authorities and local self-government bodies regarding the provision of electronic services was studied by such scholars as Lytvyn and Krumova (2020) [9].

Mokhova (2021) considered European strategies for the digital transformation of public administration in her article [10]. Polozheshna investigated the issue of the application of the decentralization mechanism during the creation of capable territorial communities [1].

Razumey G., Razumey M. (2020) in their paper «Digitization of public administration as a component of the digital transformation of Ukraine» concluded that in Ukraine it is important to implement projects related to the construction of a modern telecommunications infrastructure for access to the Internet and the creation of equal conditions for such access for different segments of the population (poor and wealthy, urban and rural residents), and it is also important to continue development in the field of electronic medicine, education, television, finance, democracy, and government, not forgetting such areas as transport (both passenger and cargo), which can become a driving force for the development of tourism and attracting investments to Ukraine [12].

The concept of "digitization" in the context of digital government was considered by Savon (2021) [13]. As a result of the research, the author concluded that the concept of digital governance is completely new to Ukraine and has not yet been defined in the national legislation, however, in the conditions of the pandemic, Ukraine shows high indicators in the digitization of public services. The results are an electronic transformation of public policy, but certain challenges prevent this from happening more quickly. Most of the states with high achievements in this area are smaller in terms of territory and population than Ukraine, and therefore Ukraine needs more time to identify citizens and create equal access to the Internet throughout the country.

Sas (2019) [14] also considered the features of digitization of public services.

The international experience of digitization of public administration in Estonia was reviewed by Syvolapenko (2018) [15]. Problematic issues of digitization of electronic administrative services were analyzed by Sydorenko (2021) [16]. Tkachuk (2016) also considered the relationship between local self-government, digitization, and decentralization [17]. Chornopyskyi (2018) considered the
constitutional and legal aspects of decentralization of power and regulation of digitization in Ukraine [18]. Kharkovsky (2021) analyzed the foreign experience of digitization of tax administration [19].

An equally important study on the informatization of local councils was conducted by Zheldybyn (2018) [20]. The impact of modern information technologies on local government was analyzed by Hothi (2012) [21]. The role of electronic democracy in public administration in Ukraine was considered in their work by Kormych L. and Kormych A. (2019) [22].

Thus, as can be seen from the above-analyzed list of literature, the processes of digitization of public administration arouse the interest of many scientists, however, local self-government in the conditions of digitization and the international experience of its implementation has not been studied enough, which causes interest in the given topic.

4. Main Results

4.1 General provisions on digitization of local self-government bodies

The 21st century is characterized by global digitization, which covers all countries of the world and leads to changes in the field of management and service provision. The state system of countries is being transformed based on the processes of decentralization, digitization, and democratization, and the forms of interaction between authorities and society are changing.

In the scientific literature and the legislation of various countries, the concepts of “digital transformation”, “automation” and “data digitization” are equated.

Let’s consider the differences between these concepts.

Automation – makes the process less dependent on the human factor, while not changing the essence of the processes (a certain workflow is described using a certain algorithm and then transferred to a digital format).

At the same time, digital transformation consists of:
1. External communication (the building of relations with clients and partners is transformed).
2. Business models (flexible orientation to the beneficiary of the service (resident)).
3. Project processes (use of Agile and Lean project processes, Scrum).
4. Lean production (aspiration for constant minimization of losses and maximum focus on the consumer).
5. Working with data (the use of artificial intelligence makes it possible to make decisions in a situation with incomplete and asymmetric information).
6. Internal communications and relationships (possibility of remote work, outsourcing, and freelancing).

So, as can be seen from the above analysis, digital transformation or digitization is a holistic rethinking of the management model, the transformation of all processes, and the transition to the use of new tools (Zhosan, 2020) [5].

4.2 International experience of digitization of local self-government bodies

In the process of digitization of local self-government bodies, it is important to take into account the experience of leading countries that are already effectively implementing digitization processes into the system of improving public administration activities.

Let’s consider this experience in more detail.

1. Estonia. There is a high level of digital society and actively developing processes in the direction of e-democracy, thanks to which more and more government spheres work online every year. For example, voting in elections in this country takes place online. Also, after the reform of public administration, prerequisites were created for reducing the level of corruption in public spheres (Svulapenko, 2018) [15].

Great Britain. In some cities, a digital strategy has been successfully implemented in the field of service provision and decision-making. The digital strategy aimed to develop local economies and transform communities, improve access to digital technologies, improve quality of life, financial inclusion, health and well-being, employment, and civic participation. At the same time, local authorities were aware that digital technologies have a disruptive effect on global economic markets. With this in mind, the expediency and usefulness of implementing similar technologies in the field of services, tourism, digital product development, and transport were analyzed. As a result of the program, Glasgow was ranked fifth among the cities with the most digital jobs in the UK. A successful strategy was focused on increasing the number of transactions that can be carried out on the Internet; ensuring uninterrupted access to digital technologies and services in the field of health care and social services; implementing digital education; on introducing digital planning and the creation of three-dimensional space of an intelligent 3D city – our technology, based on artificial intelligence; on the development of digital heritage and tourism – a whole set of technologies that allows you to successfully navigate in the important places of Glasgow’s history and its antiquities. At the end of the implementation of the digital strategy, an analysis of the achievements was made and it was found that the gaps in skills and their needs, which exist in the city, have been reduced thanks to a targeted increase in the level of availability of skills and talents; the population has acquired skills for working with digital technologies, which are important for local companies; the city has achieved the necessary diversity in its digital workforce (Kalaman, Purtskhvanidze, 2020) [6].
Singapore. It is the first country in the world where electronic government operates (Savon, 2021) [13]. The USA. Actively uses the electronic voting system (Savon, 2021) [13].

In general, from the analysis of the Digital Economy and Society Index (DESI) 2020 in the direction of digital public services, the best indicators of the digitalization of public services had the following countries of the European Union: Estonia, Spain, Denmark, Finland, and Latvia. Therefore, in the context of reforming public administration in the direction of digitization of public services in Ukraine, it is necessary to take into account the experience of digitization of public services in the above-mentioned countries of the European Union (Bignyak, Mykhalchuk, 2021) [2]. Thus, from the above analysis, it can be seen that many countries are making efforts using digital transformation tools to provide the necessary conditions for local self-government to be more inclusive, efficient, accountable, and transparent.

5. Conclusions

As a result of the research conducted on the international experience of digitization of local self-government bodies, the following conclusions were drawn:

1. Digitization, which is positioned as a new type of information and telecommunication technology that cover and change all spheres of social life, although it is in the process of formation and already has a powerful potential, which provides a chance for state authorities and local self-government bodies to qualitatively change service and everyone's access to making socially important decisions.

2. An important direction of state policy is the implementation of information, communication, and digital technologies in the activities of local self-government bodies to digitize the services provided by such bodies. To solve this problem, every state is taking measures to reform public administration in conditions of digitization. As a result of such a reform, it becomes possible to transform the existing public administration system to a new innovative level, at which municipal services are provided electronically, which in turn will make it much easier for every citizen and business representative to access them.

3. From the experience of foreign countries (Estonia, Great Britain), it was concluded that the introduction of information technologies has a positive effect on the work of local self-government bodies, allows working with large volumes of information, and increases the efficiency of such activities. As a result of successful digitization, it is possible to achieve an increase in the quality of life of the population and the efficiency of management. However, many factors can slow down the implementation of digitization: lack of financial resources in communities; lack of a unified approach to the use of information resources; insufficient protection of information; weak level of knowledge in the field of IT among the relevant employees of local self-government bodies.

Regarding further scientific research, it is worth analyzing the features of digitization of digital services provided by local self-government bodies, as well as problematic issues of this process.

References

[3] Dyachenko, S.: Digitization as a modern mechanism of local finance management in conditions of decentralization of power. In: Investments: practice and experience, vol. 8, pp. 126–131. http://www.investplan.com.ua/?op=8&qw=%D0%A1+%D0%90+%D0%94%D1%8F%D1%87%D0%95%D0%BD% D0%BA+%D0%BE (2021)
[9] Lytvyn, N.A., Krupnova, L.V.: Digitization as a means of increasing the openness, transparency and efficiency of the activities of state authorities and local self-government bodies in the provision of electronic services. In: Irpin Legal


[15] Syvolepenko, T.L.: Achievements and prospects of digitization of public administration in Estonia. In: Theory and practice of public administration, issue 2(61), pp. 257—263. http://dspace.wunu.edu.ua/bitstream/316497/44342/1/%D0%A5%D0%B0%D1%80%D0%BA%D0%BE%D0%B2% D1%81%D1%88%D0%BA%D0%B8%D0%B8_%D0%A4% D0%9D%90%0%B2%BC-21_original_07022022_110338.pdf (2021)


Boris Perezhniak  Doctor of Legal Science, Professor of Constitutional Law Department of National University "Odesa Law Academy", Honored Lawyer of Ukraine, Academician of the National Academy of Sciences of Higher Education of Ukraine, Ukraine. ORCID https://orcid.org/0000-0002-4096-0861

Larysa Vasylechuk  Candidate of science of law (Ph.D), Associate professor of the Department of Constitutional Law and Comparative, Uzhgorod National University. ORCID https://orcid.org/0000-0002-8370-0541

Tetiana Bevz  Ph. D. candidate of the Department of State and Legal Disciplines, Institute of Law named after I. Malinovskyi, National University of Ostroh Academy, lawyer. ORCID https://orcid.org/0000-0001-9010-7474.

Serhii Pyroha  PhD candidate in Law, Augustin Voloshin Carpathian University, Uzhhorod, Ukraine. ORCID https://orcid.org/0000-0002-7093-3207

Oleksiy Ulianov  PhD in Law, Associate Professor, Honored Worker of Science and Technology of Ukraine (Odesa State University of Internal Affairs, Odesa, Ukraine.). ORCID: https://orcid.org/0000-0002-3397-0965