

DOI: 10.55643/fcaptp.1.66.2026.5021

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Received: 10/10/2025

Accepted: 25/01/2026

Published: 28/02/2026

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# DEVELOPMENT OF PFS IN THE CONDITIONS OF DIGITALIZATION AND SUSTAINABILITY

## ABSTRACT

Ensuring digital transformation of the PFS today is one of the strategic tasks of the state, considering the systemic application of digital technologies (DT) by other economic entities in their activities. Understanding the specifics of the impact of these technologies on the formation and use of financial resources within the specified system is important and relevant to conducting additional research in this direction. In the article, the impact of DT on the functioning and transformation of the public finance system (PFS) is examined. For this purpose, the essence of the category "public finance" is specified, and the main functions of public finance that they perform within the financial system of the state are determined. This allowed us to specify the content of the "PFS" and highlight features of this system's functioning. Essence of the digital economy, prerequisites for its formation, and specific features of its further development are considered in detail. This made it possible, based on the results obtained, to specify the role of DT in the development of the PFS, to determine the advantages of their use, and the main threats to their application in modern conditions. Attention was paid to identifying modern information and communication innovations that are already being used to implement changes in the PFS. Among these innovations, the following were identified: artificial intelligence technologies, blockchain technologies, Big Data and Big Data analytics, and Internet of Things. In the article, directions of development of the PFS in the digital economy are formulated, and obstacles to their implementation are described, which today hinder the digital transformation of the specified system.

**Keywords:** public finances, state finances, digital economy, digitalization, sustainable development, state budget, local budgets, local governments, tax system, budget system, financial policy, financial system

**JEL Classification:** H50, H61, O38

## INTRODUCTION

Public finances play the key role in the functioning of the financial system of any country. They implement many functions that allow state authorities and local governments to perform their functions through the creation, distribution, redistribution, and use of financial resources that they accumulate and direct to achieve economic and social goals. In modern conditions, the PFS is being transformed in accordance with new challenges and threats that generally affect the country's financial system. Development of DT also actively affects the functioning of the public finance sector, requiring the state to use the potential of these technologies to increase transparency of accumulating financial resources in budgets of all levels, their use, and improve the quality of public services. All this highlights the importance of involving information and communication innovations to increase the efficient functioning of the PFS.

The purpose of the article is to deepen theoretical and applied provisions of the development of the PFS in the context of the formation of the digital economy. To achieve this goal, the following tasks were set: to specify the essence of public finance and its main functions; to determine the content of the PFS and describe features of its functioning; to consider content of the digital economy, to determine its prerequisites for formation and specific features; to summarize advantages of using DT for development of the PFS; to clarify threats of the use of these technologies; to substantiate main

information and communication innovations that are used today in the PFS; to specify directions of digital transformation of the PFS and to substantiate obstacles to their implementation.

## LITERATURE REVIEW

The digital economy penetrates all spheres of economic life and, accordingly, into the PFS as well. Today, a significant number of countries are already actively using DT to transform this system to improve the mechanisms of functioning of state authorities, the budget, tax system, and in general to increase stability of the state's financial system to internal and external threats, and its financial security. Accordingly, the issue of the impact of DT on the functioning of the PFS requires detailed consideration to specify consequences that can be obtained from their active use, describe advantages and disadvantages of their application, determine directions of accelerating digital transformation of the specified system and identify those risks and obstacles that hinder this transformation. The authors (Zhuk I. et al., 2023) note that the development of information technologies allows for faster and more efficient administration of many processes in the field of public finances, including control over the accumulation and expenditure of funds. The authors analyzed features of the application of information technologies to modernize the management of state and municipal finances.

The article (Zhuk I. et al., 2022) is aimed at finding effective digitalization tools to improve public administration in the financial sector. The authors investigated which countries are most active in using digitalization tools in the public administration system, identified the most effective tools in terms of their feasible implementation, and developed recommendations to improve digitalization of the public administration system in the financial sector.

Rabeh Morrar et al. (2024) and Popelo O. et al. (2024) examined the ecosystem around startups, with particular focus on public finance, and outlined the main aspects of the application of blockchain technology in managing the financial stability of an enterprise. In particular, analyzed how public authorities can improve the regulatory framework and adopt incentive policies for startups and entrepreneurship to create a positive long-term impact on both the overall economy and public finances. According to the scholars, their proposals are expected to contribute to an increase in the number of startups, expanding opportunities for expansion, and opening up new domestic and international markets.

Sinurat M. (2024) analyzes the public finance curriculum implemented by the Institute of Internal Affairs Management. The authors believe that highlighting literature on public finance curricula has implications for providing a comprehensive analysis of the impact of an integrated curriculum through education, training, and upbringing from philosophical, ontological, and methodological perspectives.

Liu Jie et al. (2024) analyze the impact of public development financing on company innovation using loans from development of public financing institutions. Results of the research demonstrate that the impact of public development financing on innovation depends on the nature and technological orientation of the company.

Jung Hoyong (2024) analyzed that from a local finance perspective, the effectiveness of local recovery policies through relocation of public institutions may be limited. Outcomes show a decrease in overall per capita income, indicating the need for additional measures to promote sustainable urban development.

Zhavoronok A. et al. (2022) analyze in their studies the state policy regarding various transformational aspects of the region and investigate regulatory aspects.

Analysis of publications proves the relevance of the research topic and justifies the need for further research on the topic of development of the PFS, especially under the impact of digital technologies.

## AIMS AND OBJECTIVES

The purpose of the article is to investigate the features of the development of the PFS in the context of the emergence of a digital economy.

The objectives are:

1. To determine the essence of the definition of "public finance" and describe the functions of this component of the country's financial system.
2. To describe the content and component composition of the PFS.
3. To consider the features of the functioning of the PFS.

4. To specify the essence of the digital economy and to determine its characteristic features.
5. To systematize the advantages of digitalization of the PFS.
6. To identify threats to the digital transformation of the PFS.
7. To describe DT and the features of its use in the functioning of the PFS.
8. To propose directions for the development of the PFS in the context of a digital economy.
9. To identify obstacles to the use of DT in the development of the PFS.

## METHODS

To conduct the study of the impact of DT on the development of the PFS, a range of scientific approaches was used. First, the methodology of the system approach was applied to consider the essence of the "PFS", to determine components of this system, and features of interaction between them to achieve the common goal. This was also implemented based on using a set of theoretical methods, namely: content analysis, abstraction, and generalization, to determine the essence of the category "public finance", to justify the features of functioning of the PFS. In addition to the above methods, the following methods were also used in the work: analysis, synthesis, induction, deduction - when considering the essence of the "digital economy", determining prerequisites for its formation and specific features of functioning in modern conditions, as well as describing the role of DT in development of the PFS, identifying advantages and disadvantages of their application. The classification method was used to justify obstacles to the use of these technologies in this system development, which were divided into three groups: organizational, political, and economic. Application of systematization and grouping methods allowed us to identify the main DT that are actively used today to develop the PFS, and to describe features of their application.

## RESULTS

Public finances are associated with the movement of financial resources that occurs between economic entities, among which the main role is played by state authorities, local governments, and other state institutions. Public finances reflect that part of the country's financial system that is associated with the movement of funds from state institutions to other economic entities and vice versa. Public finances play an important role in the functioning of the specified system and perform some functions that are inherent in them. Among these functions, the following can be distinguished.

The distribution and redistribution function is to ensure movement of financial resources between entities, including state authorities and local governments, in accordance with established norms and adopted rules.

Regulatory function - through the PFS, the influence of state authorities and local governments on activities of economic entities can occur, which is carried out using tools and methods of the financial mechanism and the state regulation system of the economy.

Social function - through the system of public finances, support is provided to socially vulnerable groups of the population, financing of the social sphere of the state, including health care, education, culture, sports, and social security. Social function is one of the most important functions of the state and can be implemented exclusively due to the available financial resources in state authorities.

Control function - state authorities and local governments must ensure effective use of financial resources that are formed and distributed in the PFS to achieve the main goals of socio-economic development of the country.

Stimulating function - state authorities and local governments, if they have the necessary financial resources, can create favorable conditions for the development of individual economic entities, industries, and spheres of the national economy.

Public finances are a complex system of relationships between economic entities within the national economy that arise in the formation and use of financial resources, primarily between state institutions and business entities, which, on the one hand, contribute to the formation of these resources, and on the other hand, receive them for their own development. The specified system is an inherently complex object, since it reflects a significant set of entities and complex relationships between them. Let us consider in more detail the essence of the PFS.

The PFS is a complex object that reflects main subjects, relationships between them that arise in formation, distribution, redistribution, use, accounting, and control of financial resources of state authorities and local self-government bodies, interacts with elements of the external environment, and functions for a specific purpose (Figure 1).

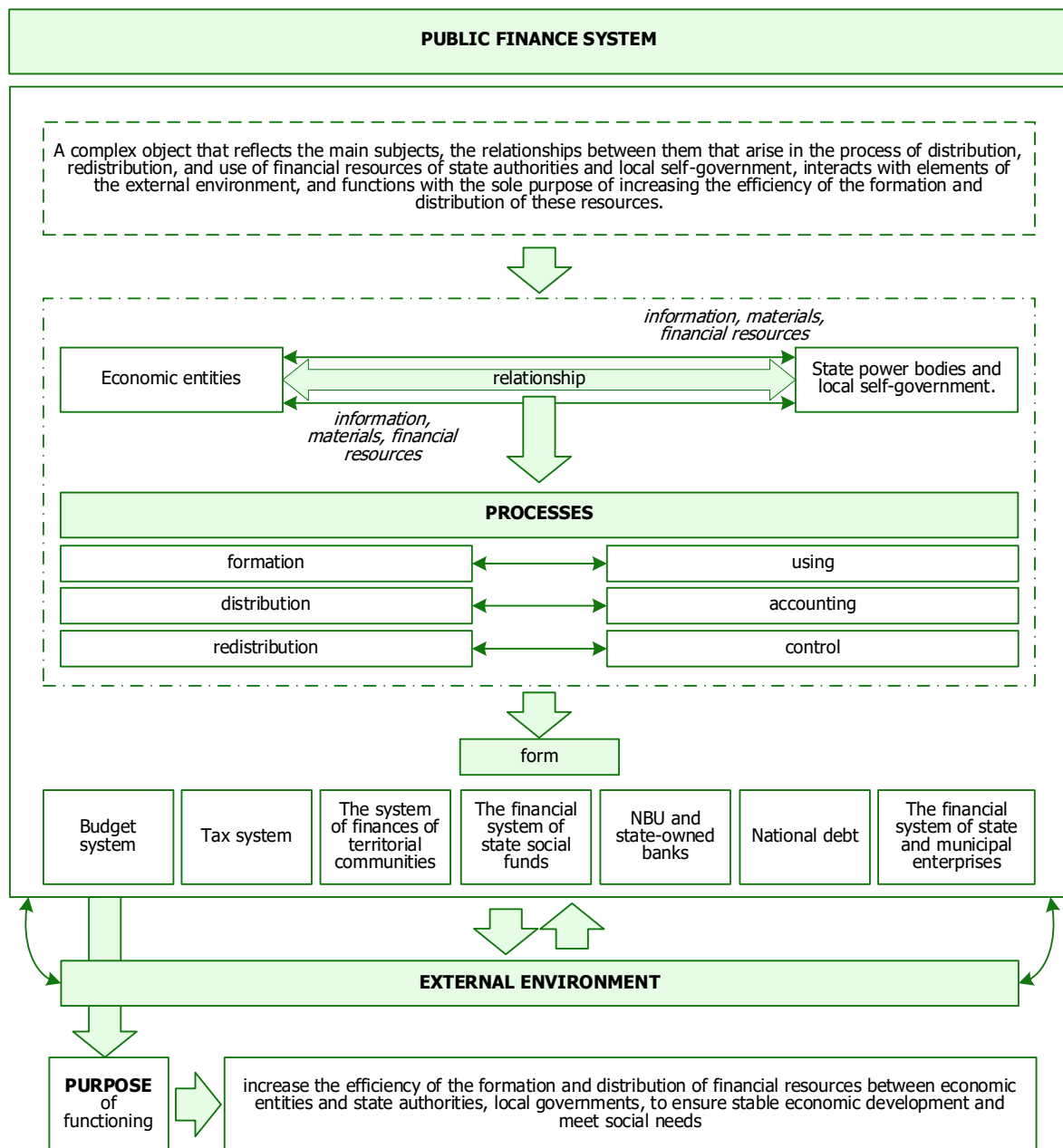


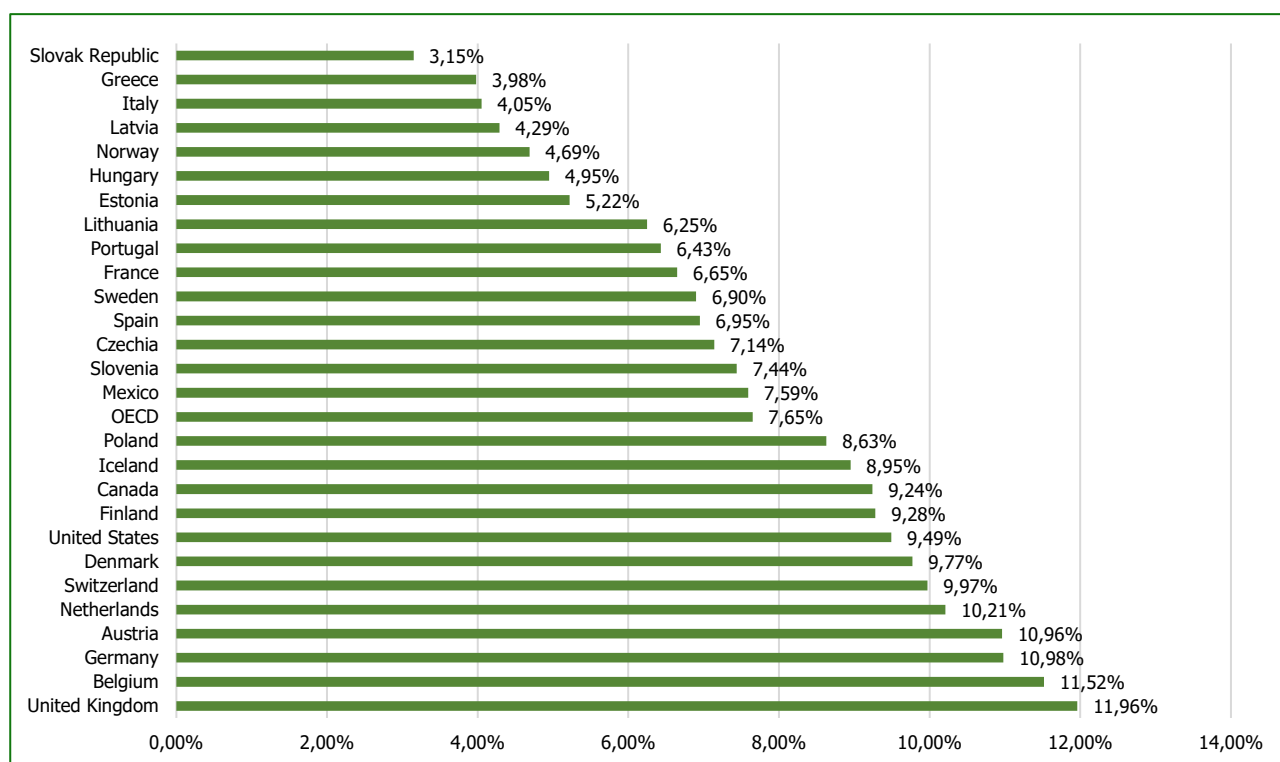
Figure 1. PFS.

Let us consider the features of the functioning of the PFS:

1. An integral part of the subjects of this system are state authorities, local governments, state social funds, and other state institutions.
2. The system operates at both the macro- and mesoeconomic levels.
3. The system is related to the formation of state and local budgets, which clearly define sources of their content and directions of use.
4. Movement of financial resources within the system is necessarily regulated by current legislation, established norms, and rules.
5. Provides for the organization of constant control using state and local budget funds.

6. Is related to the state's performance of the social function, which is mandatory to ensure an adequate level of social protection for citizens.
7. Functioning is determined by the main provisions of the state's financial policy, which must correlate with basic provisions of the implemented model of the national economic policy.
8. System interacts with the external environment, an important role in which is played by international financial institutions and organizations with which interaction takes place regarding the formation and use of financial resources.
9. Plays a key role in ensuring the state's budgetary security.
10. Develops due to the influence of many internal and external factors, among which the following play an important role: economic growth in the country, stability of the banking system, absence of crisis phenomena in the world economy, etc.
11. Development is accompanied by elements of independence in the management of financial resources at the level of central government bodies, local governments, individual state social funds, and other institutions.

Modern economic development of society is associated with digital technologies and their active application in all spheres. These technologies already play an important role in the development of the country's financial system, including in the public finance system. Despite active use of the potential of these technologies by banking and other financial institutions, information and communication technologies actively influence public finances, increasing transparency of their formation, distribution, and control over spending, contributing to the growth of the quality of services of state institutions. Figure 2 presents information on the growth rate of the ICT sector in both European and the US countries.



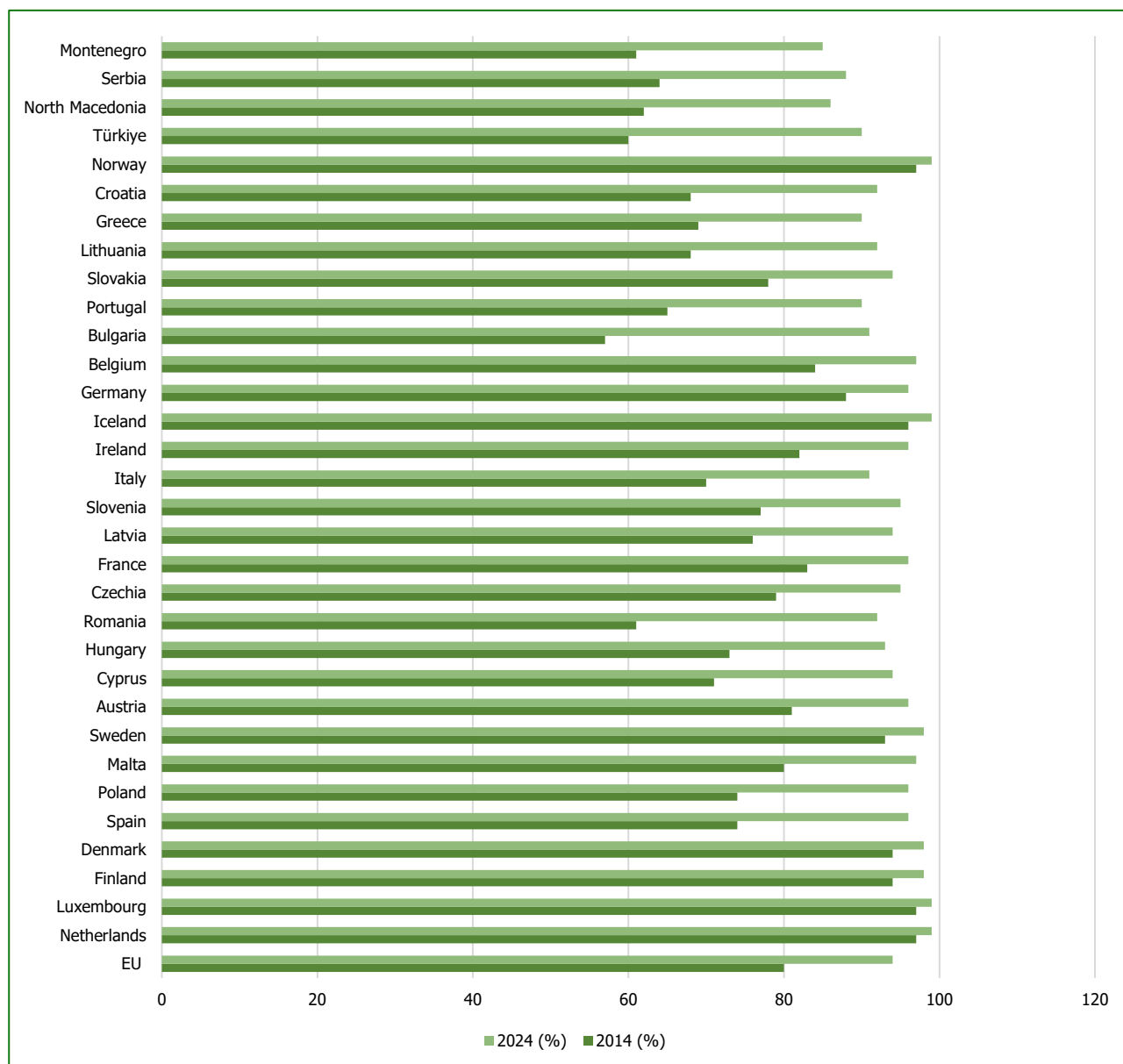
**Figure 2. Information and communication technology (ICT) sector's growth rates, %.** (Source: OECD (2024))

The research shows that the information and communication technology (ICT) sectors of OECD countries have significantly outpaced the growth of the economy as a whole over the past decade. The ICT sector grew about three times faster than the overall OECD economy between 2013 and 2023, with an average growth rate of 7.6% in 2023 (OECD, 2024).

The digital economy is an economic system that develops based on active development and use of DT in all spheres of society and sectors of the national economy. These technologies affect all economic processes without exception, namely: production, distribution, exchange, and consumption. They also play an important role in the functioning and development of economic entities, shaping the potential of their future development. Today, it is quite clear that the digital economy is

an alternative path to economic development for many countries. Its further development will be accompanied by increasingly deeper penetration of information and communication technologies into economic relations. Figure 2 presents information about the essence and features of the digital economy.

At the same time, there is an active development of digital infrastructure in developed countries of the world, as a result of which even more consumers of digital content are joining the digital world, and therefore potential participants in relations that occur between economic entities exclusively in virtual space. Today, countries are investing significant resources in order to increase the level and quality of Internet connectivity, to ensure the improvement of digital skills of households and business entities. Figure 3 shows information on household access to the Internet in EU countries in 2014 and 2024.

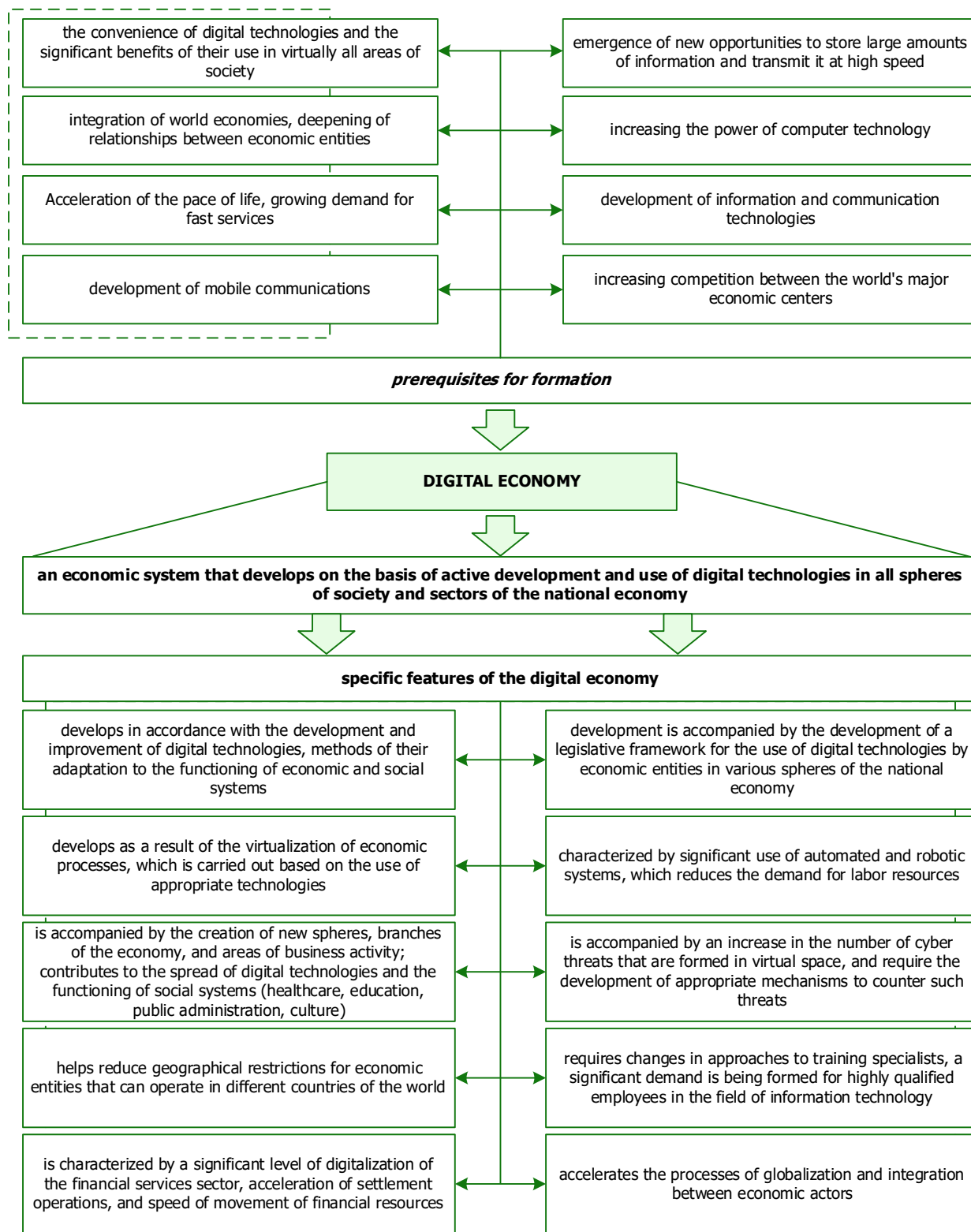


**Figure 3. Household access to the Internet in EU countries in 2014 and 2024, % of all households.** (Source: Eurostat (2025a))

According to Figure 3, we can conclude that household access to the Internet in EU countries has significantly improved over the past ten years. The leaders in terms of quality and accessibility of communication are the countries of Northern Europe. For example, in Finland, this indicator at the end of 2024 was 97.35%, in Denmark, 96.92%, and in Norway, 98.1%. However, the leaders in terms of this indicator are countries such as the Netherlands, 99.04% of households have access to the Internet, and Luxembourg, 98.84%. The Internet penetration rate in Eastern European countries is somewhat lower. For example, in Bulgaria it is 92.12%, in Croatia - 88.37%, in Slovakia - 90.54%. However, it is the countries of Eastern Europe

as a whole that have improved the level of population access to the Internet the most during 2014-2024. The outlined data only confirms the involvement of citizens in the digital world, and therefore, the number of consumers of digital services, both private institutions and enterprises, and government bodies, has increased significantly.

Figure 4 presents information about the essence and features of the digital economy.



**Figure 4. Essence of the digital economy and its characteristic features.**

The digital economy in modern conditions is associated not only with the active use of DT in the activities of economic entities, which is accompanied by savings in their costs. Specificity of this type of economy is that information technologies, which form its basis, simultaneously affect the functioning of the country's social system, financial system, public administration, penetrating deeper and deeper into other areas of social development. The uniqueness of DT lies in its universality, that is, the possible use of its potential in various spheres of the national economy and society as a whole. This contributes to the rapid spread of information and communication technologies throughout the world.

Figure 5 shows the level of Internet use in various subsystems of the social system of EU countries.

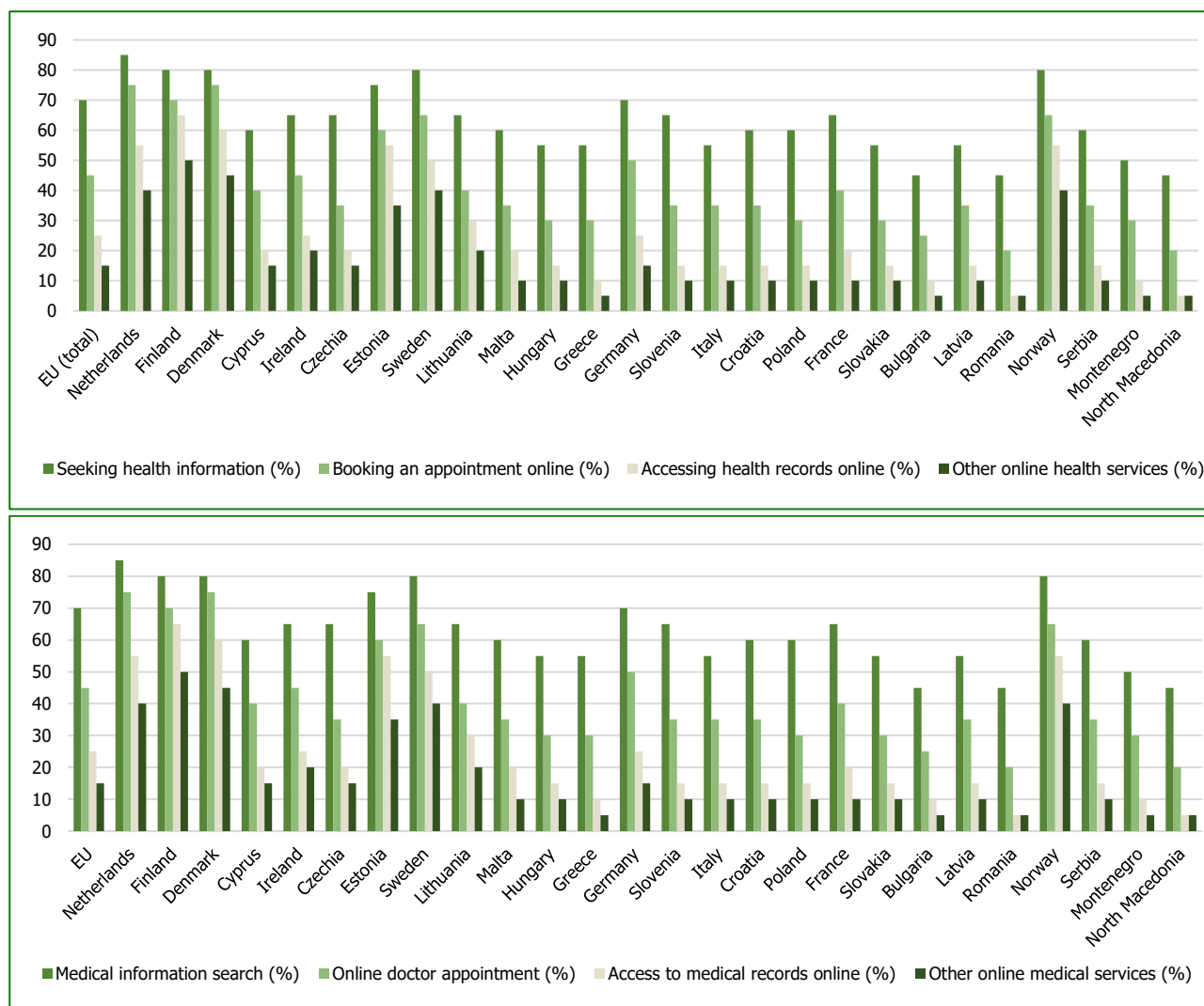
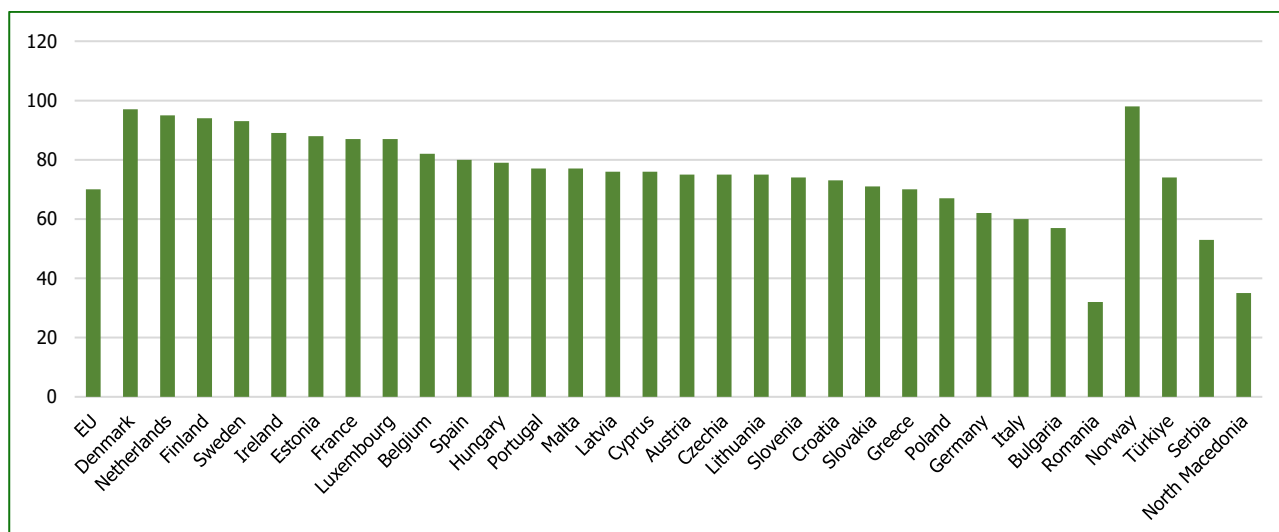


Figure 5. Use of the Internet in the social system of EU countries. (Source: Eurostat (2025c))

The data in Figure 5 only confirm the significant interest of citizens in using DT even in those areas where traditional models of social service provision were used. Accordingly, the population is increasingly inclined to use DT in the field of interaction with state authorities and local self-government. Figure 6 presents the relevant information.

From the data in Figure 6, we again observe that citizens of the Nordic countries use the services of state authorities and local governments most of all, using digital technologies, since it is in these countries that governments have made significant efforts to digitize such services. The high level of access of the population to the Internet only encourages them to receive services from state institutions in a remote format.





**Figure 6. Use of public authorities' websites or applications in the last 12 months, 2024.** (Source: Eurostat (2025b))

DT plays a special role in the development of the PFS. Their active use allows for the gradual transformation of this system and significant benefits for its functioning. Among these benefits, the following can be distinguished:

1. Increasing transparency of the accumulation and distribution of financial resources by state authorities.
2. Ensuring efficient use of budget funds through automation of their distribution and accumulation.
3. Improving the quality of interaction between government bodies and citizens, for example, interaction with the tax service.
4. Reducing the state's administrative costs for the accumulation and distribution of financial resources, which allows accelerating their circulation through the automation of routine work.
5. Improving the quality of advisory assistance to citizens through the implementation of relevant information services from the tax service, pension fund, and other state institutions.
6. Reducing the number of errors that employees could make when processing significant amounts of information.
7. Reducing corruption risks by increasing transparency of the distribution system and using state financial resources.
8. Increasing citizens' access to their own personalized information related to the formation and use of budget funds (amounts of taxes paid, pension savings, etc.).
9. Ability to quickly analyze and process large amounts of information that are formed in forming and using financial resources in the pfs; it is the automation of these processes that allows us to reduce the negative impact of the human factor on analytical work and make the analysis deeper, automatic, and representative, etc.

At the same time, there are also threats to using DT in public finances:

1. Need to invest in the development and implementation of new information software products for many users.
2. Need to ensure protection of data about citizens, their financial status, funds received from budgets of various levels, taxes paid, etc.
3. Emergence of dependencies on organizations and companies that develop relevant software products and provide them to government authorities.
4. Inability to ensure equal access of citizens to digital products of state authorities, since not everyone has knowledge of digital literacy and does not always have constant access to high-speed internet.
5. Need to improve the quality of financial monitoring due to increasing opportunities for financial fraud, especially in terms of spending public funds through poor-quality tenders, etc.

However, overall, the number of advantages significantly outweighs the threats that may arise when using DT in the development of the PFS. Most of the outlined threats can be eliminated if digital literacy projects of individual government institutions are implemented in a sufficiently conscious and rational manner.

The PFS is already actively using many different digital technologies, the use of which in combination allows for maximum use of their potential for transformation of the system. Table 1 presents information about these technologies and features of their use.

**Table 1. Digital technologies in the development of the PFS.**

| Technology name                           | Features of use in operation PFSs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Artificial intelligence technology</b> | <ul style="list-style-type: none"> <li>▪ use for clearer analysis of income and expenditure of financial resources;</li> <li>▪ automatic analysis allows for the timely identification of risks and recommendations of measures to minimize their negative impact;</li> <li>▪ allows to increase the level of transparency of the movement of financial resources and timely identify anomalies in their circulation between economic entities;</li> <li>▪ use in public procurement can help reduce fictitious transactions and maintain honesty and fairness in their organization;</li> <li>▪ use in the tax sphere makes it possible to analyze financial condition of payers in an automatic mode, examine tax returns, and process customer requests more quickly;</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Blockchain technologies</b>            | <ul style="list-style-type: none"> <li>▪ transparent movement of financial resources, especially funds spent by various economic entities, is increasing;</li> <li>▪ possibility of forging financial documents on the movement of budget resources is reduced;</li> <li>▪ contributes to reducing the misuse of budget funds;</li> <li>▪ simplifies the approach to tenders through a more objective assessment of the financial condition of their participants;</li> <li>▪ use in the tax service will help reduce fraudulent and illegal actions of their employees;</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Big Data and big data analytics</b>    | <ul style="list-style-type: none"> <li>▪ possibility of conducting a detailed analysis of receipts and expenditures of budget funds, identifying areas of their inefficient use;</li> <li>▪ allows to increase in the efficiency of using funds by managers, to identify those entities that really effectively use them to ensure their own work;</li> <li>▪ allows for analysis of the effectiveness of financing state programs and the use of funds by local governments;</li> <li>▪ contributes to the accumulation of significant amounts of financial information, which makes it possible to use it for forecasting budget revenues and expenditures, and when developing a new state budget;</li> <li>▪ rapid processing of available financial information, i.e., history of the state's relations with each economic entity, allows assessing future risks of providing them with financial resources;</li> <li>▪ contribute to in-depth analysis of the macroeconomic situation in the country, the state of the financial system, which has a positive impact on the identification and prevention of potential crises that may threaten the stability of the state's economic development;</li> </ul> |
| <b>Internet of Things (IoT)</b>           | <ul style="list-style-type: none"> <li>▪ allows to increase the efficiency of resource use by state authorities and local governments (buildings, transport, etc.), to exercise control over utility costs;</li> <li>▪ active use of IoT in medical institutions and educational institutions, they also contribute to saving resources and increasing the efficiency of their functioning and the quality of services provided;</li> <li>▪ use of IoT contributes to better management of critical infrastructure facilities owned by the state, which positively affects the efficiency of their operation and ensures longer operating time;</li> <li>▪ its use allows us to more clearly imagine the situation with the functioning of many state institutions, to correctly assess their financial condition and real need for financial resources for stable functioning.</li> </ul>                                                                                                                                                                                                                                                                                                                          |

Directions for development of the PFS in the digital economy:

1. Further implementation of DT to automate the formation and use of budgets at all levels, increasing transparency of these processes.
2. Implementation of electronic budgeting.
3. Automation of interaction with the tax service, improving the quality of tax advice to clients, and virtualization of submitting necessary information to this service.
4. Active use of DT to identify tax and financial risks related to tax payments.
5. Automation of paying social benefits and subsidies, and the use of biometric technologies to increase the level of security of both relevant social services and client information.
6. Increasing the efficiency of the functioning of the cybersecurity system in public finances, automatically detecting potential cyber threats, and counteracting their occurrence.
7. Deepening cooperation with FinTech institutions to improve and develop new DT for the effective functioning of the PFS.
8. Increasing the level of digital literacy of employees of state authorities, local governments, etc.

However, today, the active use of DT in the functioning of the PFS faces significant obstacles of various kinds (Figure 7).

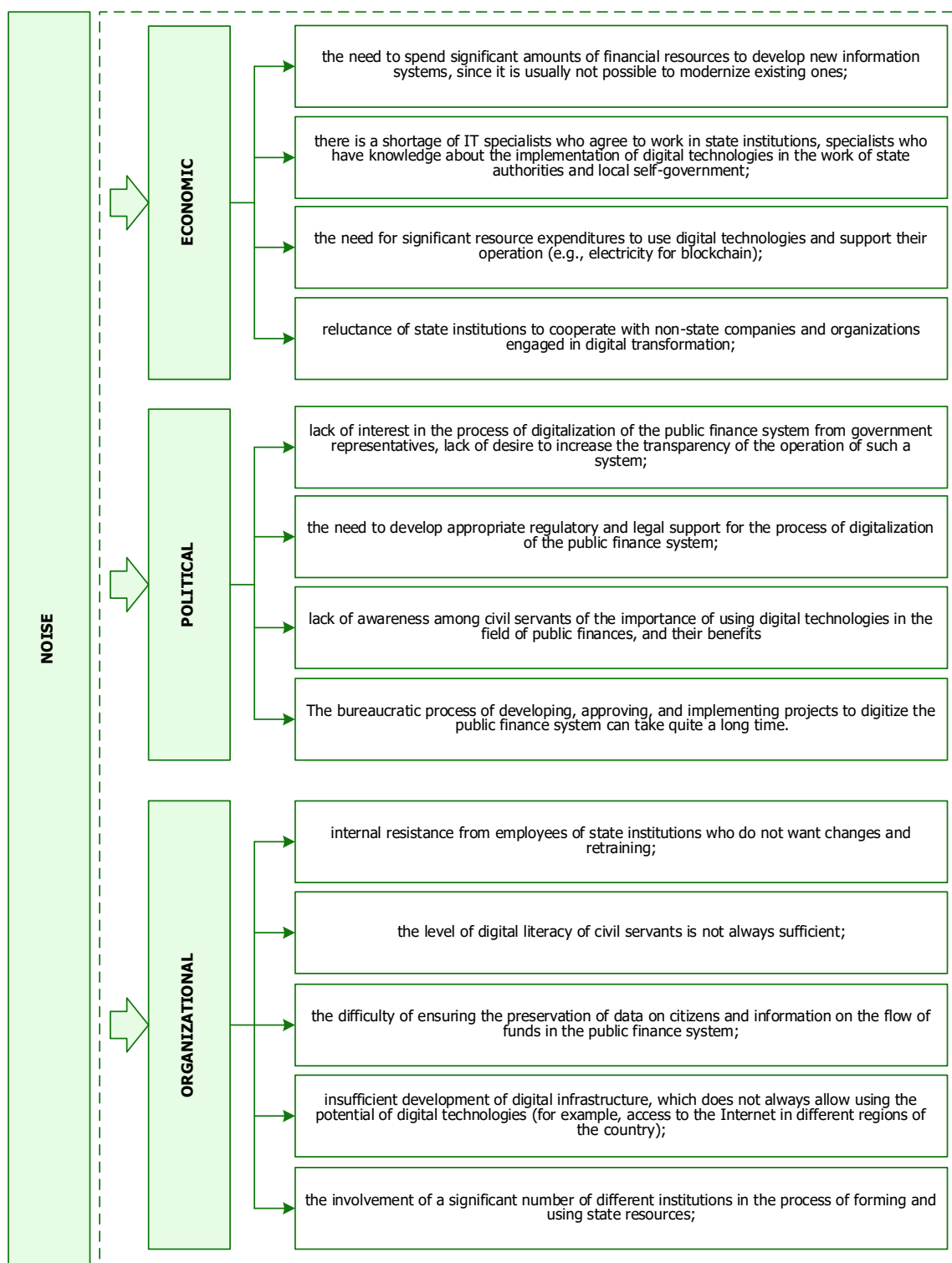


Figure 7. Obstacles to using DT in the development of the PFS.

## DISCUSSION

Sharing the opinion of Istrate M. et al. (2024), who are convinced that the sustainable development of local public finances is of general interest in the context of socio-economic transformations of recent decades. The authors identify regional patterns depending on the level of development, geographical location, or quality of infrastructure. Scientists prove the need for real administrative reform to reduce the dependence of local budgets on subsidies and increase their self-sufficiency, especially in rural areas.

We support the results of the research of Konrad Kai A. et al. (2024), who note that financial resources spent on the military sector must be used more efficiently. The authors analyze the options for reforms related to different areas.

Of practical importance is the study of Novak M. (2024), where, relying on the ideas of Holcomb, as well as on the politics of transaction costs of Charlotte Thwait, they illustrate how groups involved in political processes try to manipulate transaction costs to achieve favorable results. The authors provide an example of public finance from the Colorado Taxpayers Bill of Rights, which demonstrates how dynamic relationships between elites and non-elites contributed to institutional change.

We find the study of Lin Ting-Chun (2024), which analyzed the teaching features of the course "Public Finance", which was chosen as an example of a higher-level economics course. The authors proved the relevance of the order of teaching topics and courses and explored their direct connections.

The results of the research presented in the articles Danylyshyn B. et al. (2021) and Melnyk V. et al. (2021) are practically appropriate, which reveal innovative instruments of monetary and fiscal policy and assess the effectiveness of the financial architecture of the Ukrainian economy.

Bulavynets O. et al. (2025) analyze the experience and challenges of digital transformations from the point of view of the impact of social transfers on the efficiency of public finances. The results of the study demonstrate that at the current stage, there are problems with the implementation of digitalization in public finances. Popelo O. et al. (2025), Jakubek P. et al. (2023) analyzed the impact of the rapid development of digital business on the innovative and intellectual development of regions, the features of managerial control in the system of ensuring the economic security of private companies and state institutions were investigated, which, in our opinion, are important studies in modern conditions that require more in-depth further analysis.

## CONCLUSIONS

The article deepens the theoretical and applied provisions of the development of the PFS in the conditions of the formation of the digital economy. This was done through a detailed consideration of the essence of public finance and the digital economy as economic categories. It is substantiated that public finance performs the following functions: distributive and redistributive, regulatory, social, control, and stimulating. A detailed analysis of the content of such functions allows us to assert that the PFS plays a key role in the system of state regulation of the economy, since, through the specified system, there is a significant redistribution of financial resources that can be directed to support various economic entities. It is determined that the PFS plays an important role in the performance of the state's social function. For a more detailed understanding of the essence of the PFS, the article specifies the content of such a system, which is carried out through the use of the methodology of the system approach. The specific features of its functioning in modern conditions are also substantiated.

Consideration of the features of the functioning of the PFS allowed us to deepen our understanding of the impact of DT on its development. The article pays attention to the justification of the essence of the digital economy, which is proposed to be considered as an economic system that develops on the basis of active development and use of DT in all spheres of society and sectors of the national economy. As a result, the prerequisites for the emergence and development of this type of economy were also detailed, and its specific features were identified.

The article specifies the advantages and disadvantages of using information and communication technologies in the functioning of the PFS. It is established that, given the significant scale of such a system, the process of its digitalization cannot be fast, but requires a more comprehensive and systematic approach to its transformation. The active use of DT in the work of the PFS allows, first of all, to increase the level of transparency of the functioning of such a system and the processes that occur within it.

The main DT involved in the process of digital transformation of the PFS is identified, among which the following are distinguished: artificial intelligence technology, blockchain technology, Big Data and big data analytics, and the Internet of Things. In the vast majority of cases, the use of DT is aimed at minimizing human intervention in the process of developing the PFS, minimizing the impact of the human factor on the processes of formation, distribution, and use of state financial resources and funds of local governments. This gives grounds to assert that in the future the use of DT will significantly affect the effective operation of the PFS and will allow more and more to obtain analytical information about the rationality of accumulation and expediency of spending budget funds.

Directions for the development of the PFS are proposed, and obstacles that hinder such development in modern realities are analyzed. First of all, it is determined that for the effective use of DT in the field of public finance, there is an objective need for significant financial resources and the availability of qualified employees in the field of information technologies. Today, the public sector significantly loses in attracting such specialists to the private sector, and therefore, this is an important obstacle to ensuring a rapid and effective process of digital transformation of the PFS. This situation requires the implementation of a set of measures for the further active development of such a system.

Further research in this area may be related to studying the impact of digital innovations on the functioning of the budget system, which will contribute to the collection of higher-quality and more accurate information on the functioning of all budget institutions and the distribution of financial resources between them.

## ADDITIONAL INFORMATION

### AUTHOR CONTRIBUTIONS

*All authors have contributed equally.*

### FUNDING

*The Authors received no funding for this research.*

### CONFLICT OF INTEREST

*The Authors declare that there is no conflict of interest.*

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## РОЗВИТОК СИСТЕМИ ПУБЛІЧНИХ ФІНАНСІВ В УМОВАХ ЦИФРОВОЇ ЕКОНОМІКИ ТА СТАЛОСТІ

Забезпечення цифрової трансформації системи публічних фінансів сьогодні є одним із стратегічних завдань держави, враховуючи те, що інші економічні суб'єкти системно застосовують у своїй діяльності цифрові технології. Розуміння особливостей впливу таких технологій на процеси формування й використання фінансових ресурсів у межах зазначеної системи є важливим та актуальним для проведення додаткових досліджень у цьому напрямі. У роботі досліджено вплив цифрових технологій на функціонування й трансформацію системи публічних фінансів. Для цього конкретизовано сутність категорії «публічні фінанси», визначено основні функції публічних фінансів, які вони виконують у межах фінансової системи держави. Це дозволило конкретизувати зміст поняття «система публічних фінансів» і виокремити особливості функціонування такої системи. Детально розглянуто сутність цифрової економіки, передумови її формування та специфічні риси подальшого становлення. Це дало можливість на основі отриманих результатів конкретизувати роль цифрових технологій у розвитку системи публічних фінансів, визначити переваги їх використання та основні загрози їх застосування в сучасних умовах. Увага була приділена виокремленню сучасних інформаційно-комунікаційних інновацій, які вже використовують для впровадження змін у системі публічних фінансів. Серед таких інновацій було визначено такі: технології штучного інтелекту, блокчейн-технології, Big Data й аналітика великих даних, інтернет речей. Також у статті сформульовано напрями розвитку системи публічних фінансів в умовах цифрової економіки й описано перешкоди їх впровадженню, які сьогодні стримують процес цифрової трансформації зазначеної системи.

**Ключові слова:** публічні фінанси, державні фінанси, цифрова економіка, цифровізація, державний бюджет, місцеві бюджети, органи місцевого самоврядування, податкова система, бюджетна система, фінансова політика, фінансова система

**JEL Класифікація:** H50, H61, O38