

**Akademia Nauk Stosowanych  
Wyższa Szkoła Zarządzania i Administracji w Opolu**

**MANAGEMENT SYNERGY: TECHNOLOGIES AND  
STRATEGIES**

**SYNERGIA ZARZĄDZANIA: TECHNOLOGIE I  
STRATEGIE**

**СИНЕРГІЯ УПРАВЛІННЯ: ТЕХНОЛОГІЇ ТА  
СТРАТЕГІЇ**

*Monograph*

*Edited by Mykola Ohienko*

*Tadeusz Pokusa*

Opole 2026

**ISBN 978-83-66567-98-6**

**Management synergy: technologies and strategies.** Monograph. Opole: Academy of Applied Sciences Academy of Management and Administration in Opole, 2026; ISBN 978-83-66567-98-6; 156 pp., illus., tabs., bibls.

Recommended for publication  
by the Academic Council  
of Academy of Applied Sciences  
Academy of Management and Administration in Opole  
(Protocol No. 11 of November 2025)

45-085 Polska, Opole, ul. Niedziałkowskiego 18  
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### **Publishing House:**

Akademia Nauk Stosowanych  
Wyższa Szkoła Zarządzania i Administracji w Opolu,  
45-085 Polska, Opole, ul. Niedziałkowskiego 18  
tel. 77 402-19-00/01

200 copies

Authors are responsible for content of the materials

ISBN 978-83-66567-98-6

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## INTRODUCTION

The synergy of management technologies and strategic approaches is a pivotal factor in addressing the challenges of contemporary economic and organizational transformations. The collective monograph *Management Synergy: Technologies and Strategies*, edited by Mykola Ohienko and Tadeusz Pokusa, explores this dynamic interplay through a multidisciplinary lens, focusing on the integration of innovative tools and adaptive strategies in diverse sectors to foster efficiency and resilience. This work, prepared under the auspices of Akademia Nauk Stosowanych – Wyższa Szkoła Zarządzania i Administracji w Opolu, aims to provide a comprehensive analysis of how management practices, digital advancements, and sector-specific innovations can respond to modern demands, promoting sustainable development.

The monograph is organized into two thematic sections, each addressing a critical aspect of management synergy:

**Current Management Problems: By Type of Activity.** This section examines contemporary challenges in management across diverse domains, including administrative models, human resource systems, marketing adaptations in crises, and the evolving IT market. It highlights innovative approaches to optimizing processes, balancing work-life dynamics, and enhancing organizational competitiveness in a globalized context.

**Hospitality and Tourism Industry: Current State and Prospects.** Focused on the pivotal role of tourism in economic and social recovery, this section explores the preservation of cultural heritage amid conflicts, the integration of sports for tourism potential, and the development of niche activities like equestrian tourism. It addresses the need for resilient strategies, infrastructure enhancements, and adaptive policies in an era of geopolitical and technological shifts.

By integrating theoretical insights with practical applications, this monograph offers valuable perspectives for researchers, practitioners, and policymakers. It underscores the importance of synergistic strategies in navigating the complexities of modern management and industry evolution, contributing to the broader discourse on technological and strategic progress.

# Part 1

**CURRENT MANAGEMENT  
PROBLEMS: BY TYPE OF ACTIVITY**

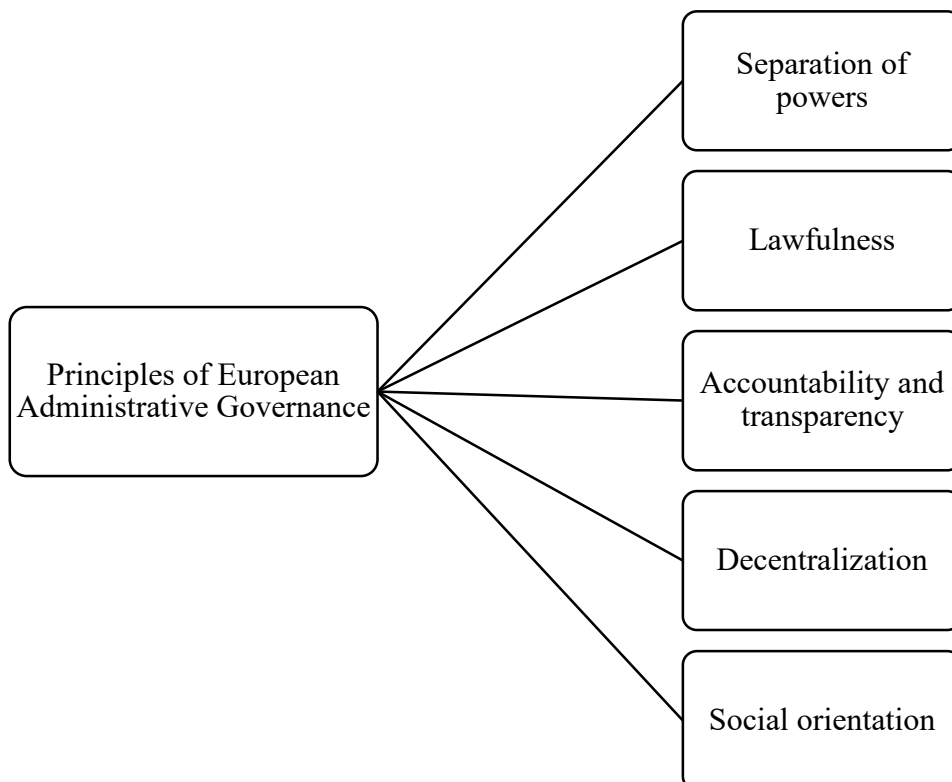
**АКТУАЛЬНІ ПРОБЛЕМИ  
УПРАВЛІННЯ: ЗА ВИДАМИ  
ДІЯЛЬНОСТІ**

### 1.1. The European model of administrative management: features and diversity of approaches

The European model of administrative governance, which has evolved over centuries, demonstrates a significant diversity of approaches. These approaches are shaped by historical, political, economic and cultural factors, but common features can also be identified that are characteristic of most European states.

Administrative governance in Europe is an important element of the state mechanism, playing a key role in ensuring the stable functioning of public institutions. The European model combines centralized governance traditions with democratic principles that imply transparency, accountability and citizen participation.

**Figure 1. Principles of European administrative governance**



Source: Compiled by the author based on<sup>1</sup>

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<sup>1</sup>URL: <https://european-union.europa.eu/>, access date 22.12.2024.

European public administration is based on a number of principles, including the following (Fig. 1):

1. Separation of powers. The organization of public administration presupposes a clear separation of legislative, executive and judicial powers.

2. Legality. All administrative bodies are required to act in strict accordance with the laws, which contributes to the protection of citizens' rights.

3. Accountability and transparency. Citizens have the right to access information about the actions of government bodies, and leaders are responsible for the decisions they make.

4. Decentralization. Many European countries prefer to distribute powers between central and regional authorities.

5. Social orientation. The management model is aimed at ensuring a high standard of living and protecting socially vulnerable categories of the population.

The number of civil servants in different European countries varies considerably depending on the structure of government, the economic situation and the historical characteristics of each country. Table 1 provides data on the share of civil servants among the total number of employed people for some

**Table 1. Share of civil servants in the total workforce in European countries**

| Country        | Share of civil servants, % |
|----------------|----------------------------|
| Norway         | 30–35%                     |
| Sweden         | 28–30%                     |
| Denmark        | 25–30%                     |
| France         | 20–25%                     |
| Germany        | 11–14%                     |
| Italy          | 14–16%                     |
| Spain          | 13–15%                     |
| United Kingdom | 17–19%                     |

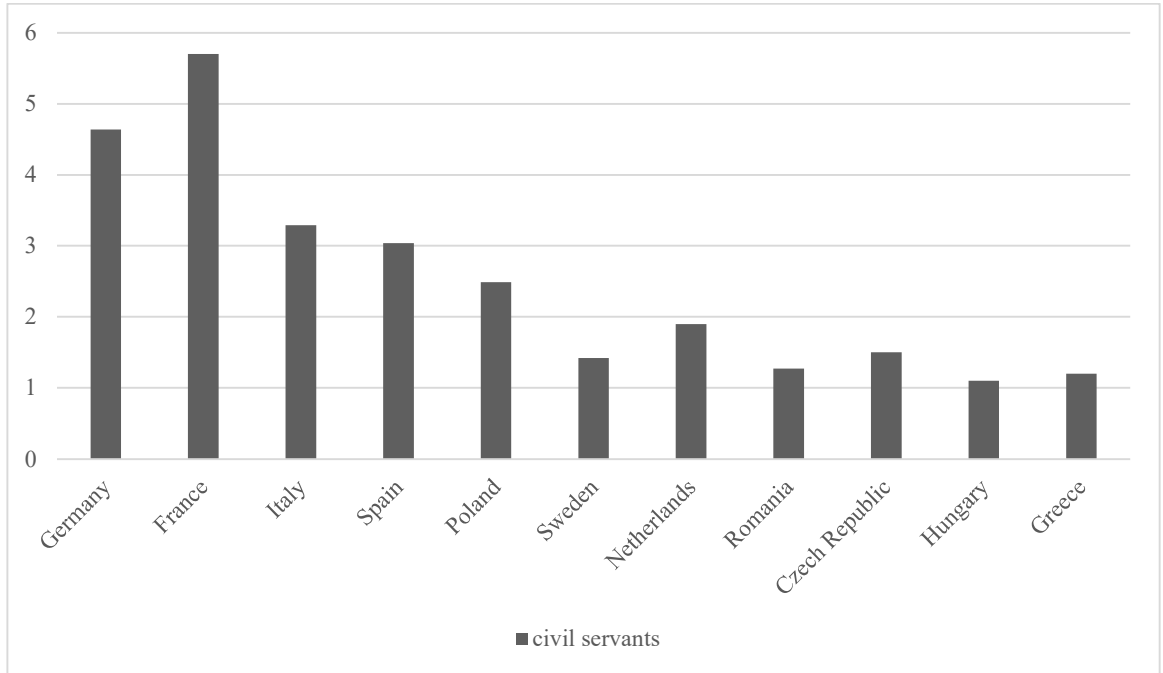
Source: Compiled by the author based on<sup>2</sup>

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<sup>2</sup>URL: <https://ec.europa.eu/eurostat>, access date 22.12.2024.

European countries. The average number of civil servants in EU countries in 2023 is presented in Fig. 2.

Figure 2. Average number of civil servants in EU countries in 2023, thousands of people.



Source: Compiled by the author based on<sup>3</sup>

Thus, large countries such as France and Germany have the largest number of civil servants. This is due to their large social system and large population. The Scandinavian countries, Norway and Sweden, have the highest proportion of civil servants in relation to the population. This is due to the strong social orientation of governance and the high level of public services. Central and Eastern European countries such as Poland, Romania and the Czech Republic have a moderate number of civil servants, which is due to ongoing reforms aimed at streamlining the state apparatus.

Thus, European countries demonstrate different models of governance, conditioned by historical and national characteristics.

The continental model, also known as the Romano-Germanic model, was formed over many centuries, beginning with the era of the Roman Empire. This system has spread widely throughout the world, especially in European countries and former

<sup>3</sup>Ibid.

colonies of France and Germany. Its key feature is the structured legal and administrative system, as well as clear regulation of all aspects of governance.

The main features of the continental model:

1. **Predominance of legal norms.** The continental model is based on clearly formalized legal acts. Legislation is the main basis of governance, determining not only the rights and obligations of citizens, but also the order of work of state bodies.

2. **The important role of administrative law.** Administrative legislation is a key element of this model. It regulates the interaction of citizens with government agencies, the procedure for providing services, the organization of the activities of the bureaucratic apparatus, and much more.

3. **Centralized management structure.** This model is characterized by a strict vertical of power. The governing bodies are located in a clear hierarchy, where lower structures are subordinate to higher ones. Such a structure allows minimizing the risks of decentralization, while maintaining a unified order in state administration.

4. **Large bureaucratic apparatus.** The continental model requires significant human resources to implement its administrative functions. A ramified network of state institutions and bodies guarantees control over the implementation of legislative norms, which makes the system stable, but also creates preconditions for difficulties in decision-making.

Germany serves as a benchmark example of the application of the continental model of governance. It has created a detailed legislative framework regulating the activities of all government bodies. Legislation strictly regulates all levels of interaction between society and the state, from federal authorities to local governments. Administrative law plays a key role, establishing the procedure for the provision of public services, licensing, taxation, etc.

France, as one of the founders of the Romano-Germanic system, demonstrates similar features: a strict hierarchy of governance, centralization of power, and traditionally strong influence of administrative law. The bureaucratic apparatus of France is considered one of the most detailed, which ensures the stability of the system, but also often causes discontent among citizens due to the complexity of interaction with government agencies.

The advantages of the continental model are:

- **Stability:** A clear system of norms and management hierarchy ensures predictability of the actions of government bodies.
- **Unity of legal space:** The unitary nature of the legislative system makes the model applicable in countries with strong centralization.
- **Control and transparency:** Thanks to the presence of a developed bureaucratic apparatus and administrative law, strict control over the implementation of legislation is ensured.

However, the continental model also has its drawbacks:

- Excessive bureaucratization: A large bureaucratic apparatus slows down decision-making, which can reduce the efficiency of the system.
- Low flexibility: with system is poorly adaptable to change, since any changes require a complex legislative process.
- High management costs: Maintaining and funding a large number of civil servants requires significant budgetary resources.

Thus, the continental model continues to be one of the most widespread systems of public administration, especially in European countries. Despite its shortcomings, it ensures stability and system city of the state apparatus, which makes it in demand in the conditions of a complex socio-economic environment.

The Anglo-Saxon model of public administration is one of the most flexible and practical systems. It was historically formed in English-speaking countries, including Great Britain, Ireland, the United States, Canada and Australia. The main feature of this model is the emphasis on achieving practical results, which distinguishes it from the more formalized continental system.

The main features of the Anglo-Saxon model:

1. Management based on customary and case law. The Anglo-Saxon model is based on the common law system, where laws are created not only by legislative bodies, but also through judicial precedents. This allows for the specific circumstances of the case to be taken into account and increases the flexibility of the system. The judiciary plays an important role, actively participating in regulating relations between the state and society.
2. Focus on results. Unlike the continental model, which prioritises formalities and adherence to procedures, the Anglo-Saxon system focuses on results. Management decisions are assessed in terms of their effectiveness and benefit to society. This approach encourages government bodies to be prompt and innovative.
3. Low level of centralization. In the Anglo-Saxon model, powers are delegated to regional and local authorities. This creates a decentralized system of governance, where a significant portion of decisions are made at the local level. This allows for local specifics to be taken into account and reduces the regions' dependence on the central government.

The United Kingdom is the founder of the Anglo-Saxon model. The system of public administration is built on a common legal basis and an active role of the judicial system. A practical approach to management aimed at achieving specific results dominates here. Local governments have significant powers in matters of education, health care, landscaping and the economy.

Ireland shares the basic principles of the Anglo-Saxon system. Combining the principles of case law with administrative flexibility, the country demonstrates successful experience in governance. The low level of centralization allows for the interests of different regions to be taken into account.

Advantages of the Anglo-Saxon model:

- Flexibility: in the ability to quickly adapt laws and management approaches to changes in society.
- Efficiency: The main emphasis is on achieving results, which encourages government agencies to show initiative and use innovation.
- Decentralization: allows regions to independently determine and solve priority tasks, reducing the burden on central government bodies.
- Trust in the judicial system: Judicial decisions based on precedents strengthen the rule of law and ensure justice.

Disadvantages of the Anglo-Saxon model:

- Diversity of standards: A decentralized governance structure may lead to differences in the quality of services provided between regions.
- Dependence on precedents: The judicial system, while playing an important role in shaping laws, can slow down the decision-making process in the absence of similar precedents.
- Risks of individualization: The lack of strict instructions can lead to uncertainty in the implementation of laws.

The Scandinavian model of public administration has gained wide recognition for its social orientation, high degree of decentralization and emphasis on protecting the rights of citizens. This system of government developed in the northern European countries such as Sweden, Norway and Denmark and has become an example for many countries striving to build a socially just society.

The main features of the Scandinavian model:

1. Focus on social justice. The Scandinavian model places particular emphasis on ensuring equal opportunities for citizens. The state acts as a guarantor of social protection, providing access to education, health care, pensions and other high-quality services. High taxes provide funding for these services, making them accessible to all segments of the population.

2. Significant autonomy of local authorities. In Scandinavian countries, governance is decentralized. Local authorities have broad autonomy, which allows them to take into account the needs and characteristics of the regions. Municipalities take an active part in budget allocation and the implementation of social programs, directly influencing the quality of life of the population.

3. The institution of ombudsmen as a guarantee of citizens' rights. One of the key features of the Scandinavian model is the creation of the institution of ombudsmen – independent commissioners for citizens' rights. They ensure the protection of the rights of the population from unlawful actions of the state, authorities or private organizations. Ombudsmen are an important instrument of transparency and accountability of the authorities.

Thus, in Sweden, the emphasis is on social equality, which is reflected in high

government spending on health care, education and social security. The autonomy of municipalities allows for effective management of resources at the local level. The institution of ombudsmen has successfully protected the rights of citizens since 1809, ensuring a high degree of trust in government bodies.

Thanks to natural resources (oil and gas), Norway has managed to build one of the strongest economies, which combines the principles of a market economy and social justice. The high degree of decentralization contributes to the equal development of all regions.

Denmark is renowned for its flexible labour market system, which combines social security for workers with ease of hiring and firing. Local government plays a key role in ensuring efficient management of health care, education and public services.

Advantages of the Scandinavian model:

- High standard of living: Citizens gain access to a wide range of social benefits, which improves their overall standard of living.
- Transparency of management: The institution of ombudsmen and the high level of responsibility of government bodies help to strengthen public trust in the state.
- Social Justice: Equitable distribution of resources and equal access to public services create conditions for minimizing social inequality.
- Effective local governance: The autonomy of municipalities allows for flexible adaptation to regional needs.

But the Scandinavian model has its drawbacks:

- High tax burden: funding the social system requires significant tax revenues, which can have a negative impact on the income of businesses and the population.
- Dependence on government intervention: extensive state participation in the economy sometimes leads to low competition in certain sectors.
- The complexity of management in times of crisis: decentralization can slow down the decision-making process in the face of acute social or economic challenges.

Thus, the Scandinavian model of public administration demonstrates a successful combination of social orientation, regional autonomy and government transparency. It remains attractive for countries seeking to reduce social inequality while ensuring the sustainable development of society.

The post-socialist model of governance developed in the countries of Central and Eastern Europe after the collapse of the socialist bloc and the transition to democratic forms of government. It is characterized by the transformation of public institutions aimed at integration with the European Union and increasing the

efficiency of public administration.

The main features of the post-socialist model:

1. Transition from a centralized to a decentralized system. After decades of centralized governance, typical of socialist countries, the post-socialist model aims to decentralize power. This means transferring a significant amount of authority to local governments to increase their accountability and efficiency.

2. Reforms aimed at improving management efficiency. In post-socialist countries, large-scale administrative reforms are being carried out, including:

- reduction of the state apparatus;
- optimization of the decision-making process;
- reducing corruption through the creation of transparent management

procedures.

3. Active implementation of EU standards. For countries seeking membership in the European Union, an important step has been to bring their legal and administrative systems into line with EU standards. This concerns both the rule of law and transparency of governance and the protection of citizens' rights.

Poland was one of the first countries in the region to successfully implement public administration reforms. The emphasis was on decentralization through the transfer of powers to regional and local authorities. Poland implemented EU standards, which allowed it to achieve significant success in economic growth and attracting foreign investment.

In the Czech Republic, after the "Velvet Revolution", a large-scale reorganization of the state system began. The country focused on simplifying management procedures and combating corruption. The Czech Republic has achieved significant success in strengthening democratic institutions and modernizing the public administration system.

Lithuania, like other Baltic countries, has been actively transforming public administration to integrate with the European Union. The country has become a regional leader in digitalization of the public sector, introducing e-services for citizens and businesses.

Advantages of the post-socialist model:

- Flexibility and adaptability: The East Socialist model strives to adapt as much as possible to the requirements of modern society and international standards.

- Decentralization: The transfer of powers to local authorities contributes to a more effective solution of regional problems.

- International integration: The implementation of EU standards contributes to the growth of trust among international partners and the improvement of the business climate.

- Fight against corruption: with the creation of transparent management procedures improves the work of government bodies and strengthens citizens' trust

in the authorities.

Disadvantages of the post-socialist model:

- Incompleteness of reforms: Many countries face problems in implementing large-scale reforms due to political instability or bureaucratic resistance.
- The gap in the levels of regional development: In the process of decentralization, the difference in economic development between regions increases, especially between large cities and the periphery.
- Dependence on the EU: some countries rely too heavily on European Union recommendations and standards, which limits their ability to govern themselves.
- Corruption risks: Despite reforms, corruption still remains a serious problem in many post-socialist countries.

Let us summarize the comparison of administrative management models in European countries in Table 2.

**Table 2. Comparison of administrative management models in European countries**

| Parameters                | Scandinavian model             | Anglo-Saxon model   | Continental model    | Post-socialist model                   |
|---------------------------|--------------------------------|---------------------|----------------------|--|
| The main principle        | Social justice                 | Focus on efficiency | Regulated management | Reforms and adaptation to EU standards |
| Centralization            | Low                            | Low                 | Tall                 | Transition to decentralization         |
| Tax level                 | High                           | Moderate            | Average              | Average                                |
| The role of the state     | Guarantor of social protection | Minimum             | Significant          | Significant                            |
| Level of corruption       | Short                          | Short               | Short                | Medium/high                            |
| International integration | Minor                          | Partial             | Partial              | Active implementation of EU standards  |

Source: Compiled by the author based on<sup>4</sup>

<sup>4</sup>URL: <https://ec.europa.eu/eurostat>, access date 22.12.2024.

The European Union has a significant influence on the national governance systems of its member states. This influence is related to the unification of legal standards, the introduction of good governance principles, and financial support for structural reforms. The changes are particularly significant in countries that have recently joined the EU, such as Bulgaria and Romania.

Unification of legal standards contributes to the creation of a common legal space in which the laws, regulations and management practices of the participating countries are consistent with uniform European standards. Unification reduces legal and administrative uncertainty, facilitating cooperation between countries.

The European Union actively promotes the concept of "good governance" - an approach based on transparency, accountability, efficiency and citizen involvement in governance. To this end, public control mechanisms, electronic governance and partnerships between the state, the private sector and civil society are being introduced. This helps to strengthen citizens' trust in government bodies.

The EU provides significant financial assistance to member states through structural funds and other support programs. For example, Eastern European countries receive significant funds to reform their administrative systems, modernize their infrastructure, and develop digital governance. Thus, after joining the EU, Bulgaria carried out large-scale administrative reforms to bring its governance system into line with the Union's requirements. Key changes include strengthening anti-corruption measures, reorganizing the bureaucratic apparatus, and developing e-governance.

Romania has actively adopted European practices to increase the transparency of public administration. Independent bodies have been created to combat corruption, the share of electronic services for citizens has been significantly increased, and the procedures for submitting documents and receiving public services have been simplified.

Challenges for European governance:

1. Bureaucratization and excessive regulation. The introduction of EU standards into management practice may be accompanied by an increase in bureaucracy. The desire to ensure full compliance with EU requirements sometimes complicates and slows down the decision-making process. This is especially noticeable in countries with a traditionally complex bureaucratic structure.

2. Digitalization of management. The European Union is actively promoting the ideas of e-governance and digitalization of administrative processes. However, the different levels of technical readiness of EU member states lead to significant disparities in the efficiency of public administration. For example, Scandinavian countries demonstrate a high level of digitalization, while Eastern European countries lag behind.

3. Migration crises. The growth of migration flows to Europe has become

one of the key challenges for the EU administrative system. States have to adapt their governance to new conditions, such as the integration of migrants, ensuring their social rights and regulating migration-related financing.

4. Globalization. The integration of EU countries into the global economic and political context requires a revision of many traditional approaches to governance. For example, increasing international competition requires more flexible and prompt decision-making.

Thus, the influence of the European Union on national governance models has both positive and challenging aspects. On the one hand, it promotes modernization, transparency and harmonization of governance systems, as well as the implementation of best practices. On the other hand, bureaucratization and various challenges, such as migration and digitalization, remain important problems for EU member states. However, the combined efforts and financial support of the Union make it possible to overcome these challenges, directing national systems towards sustainable development.

Thus, the European model of administrative management is a complex and dynamic mechanism that demonstrates both the stability of traditions and flexibility in the context of modern challenges. Despite the differences in approaches between countries, the European system of governance combines common principles of legality, transparency and social orientation, which ensures a high level of citizens' trust in state institutions. We believe that with the further development of technologies and globalization processes, the European model of governance will continue to evolve, maintaining a balance between national characteristics and uniform standards of the European Union.

European countries and Ukraine have different approaches to the implementation of key elements of governance, such as centralization, decentralization and e-government. This comparative analysis allows us to highlight the similarities and differences in governance models and their impact on socio-economic development.

Ukraine has historically been a country with a highly centralized administrative system, especially during its existence as part of the Soviet Union. Despite gaining independence in 1991, the processes of forming an effective administrative structure in Ukraine remained complex. They were caused not only by the legacy of the Soviet centralized system, but also by differences in the socio-economic development of the regions, as well as political and historical features.

After the collapse of the USSR and the establishment of independence, the Ukrainian state faced the need to reform the administrative system, which historically remained under the strict control of the central government in Kyiv. The main factors holding back the processes of decentralization and territorial governance were many socio-economic, cultural and political aspects, as well as the insufficient maturity of

democratic institutions. During the years of independence, several attempts were made to reform local government, however, despite the measures taken, significant elements of centralization still remained.

One of the most obvious problems of the centralized system in Ukraine is the financial dependence of local budgets on the center. Local authorities in Ukraine often face insufficient financial resources to meet the needs of local communities. Many regions are forced to rely on subventions and grants from the state budget, which increases their dependence on the central government (Table 3). This also limits the opportunities for sustainable economic development of the regions, since the lack of finance makes it difficult for local authorities to fulfill their obligations, develop infrastructure, support social programs, and invest in key areas.

**Table 3. Interbudget transfers (educational subvention, basic and reverse subsidies) for all regions of Ukraine for 2024, thousand UAH.**

| Region                 | Educational subvention | Basic subsidy | Reverse subsidy |
|------------------------|------------------------|---------------|-----------------|
| Vinnitsia region       | 43 345,8               | 0             | 0               |
| Volyn region           | 20 145,8               | 0             | 0               |
| Dnepropetrovsk region  | 0                      | 772 663,6     | 0               |
| Donetsk region         | 0                      | 47 446,9      | 0               |
| Zhitomir region        | 28 965,2               | 0             | 0               |
| Transcarpathian region | 184 770,5              | 0             | 0               |
| Zaporizhia region      | 0                      | 602 107,7     | 0               |
| Ivano-Frankivsk region | 165 014,7              | 0             | 0               |
| Kyiv region            | 58 932,1               | 0             | 750 000,0       |
| Lviv region            | 305 005,6              | 180 445,2     | 0               |
| Odessa region          | 490 888,9              | 0             | 4 510,0         |
| Kharkiv region         | 465 745,3              | 233 321,1     | 0               |
| Cherkasy region        | 183 767,0              | 13 000,8      | 0               |

Source: Compiled by the author based on<sup>5</sup>

<sup>5</sup>URL: <https://mof.gov.ua/>, access date 22.12.2024.

This situation undermines the principle of local self-government autonomy, does not allow the development of effective models of local budgets and has a negative impact on the quality of life of the population in remote regions of the country. Ideally, local authorities should be able to earn funds for development through taxes, attracting investments and using other local economic mechanisms. However, in the Ukrainian reality, many regions still suffer from a lack of funds, which is due to the unpreparedness of the local financial system and the inefficiency of the tax system.

Addressing the problem of local budget financial dependence would require significant reforms in fiscal policy, including the creation of a more balanced system of resource allocation, improvement of local tax and financial mechanisms, and giving local authorities greater flexibility in making financial decisions.

Another important element of the centralized system in Ukraine is the rigid vertical power structure, in which local state administrations report directly to the central government in Kyiv. This approach limits local decision-making opportunities, making governance slower and more inefficient, since decisions concerning local issues are often made in Kyiv, without taking into account the specifics of the regions and local needs.

The commitment to a rigid vertical of power also reinforces a top-down governance system, where central government intervention often leaves no room for local initiative. This makes it difficult to be flexible in responding to regional challenges and improving services for citizens, as most decisions require approval at the highest levels of public administration, which slows down efficiency.

For example, in the areas of social security, health care, education and other services, the significant role of centralized decisions violates the principles of decentralized governance. Local authorities are often limited in their ability to adapt national programs to local conditions and resolve day-to-day issues, because they depend on direct orders from Kyiv.

To solve this problem, Ukraine must strengthen local self-government by giving regional and local authorities more powers and funds to manage local processes. It should also improve the legal and financial infrastructure to create an effective decentralization system, where decisions on the distribution of financial resources, investments, and support for social projects are made at the local level.

European countries demonstrate different approaches to the organization of the administrative system and levels of centralization in governance. Many of them have complex and diverse governance systems that ensure the optimal distribution of powers between the central government and local authorities. It is important to note that although a number of European countries have a high level of centralization, modern trends tend to increase decentralization and grant more powers to regions and local authorities. This allows for the adaptation of governance to local specifics, improving the quality of service to citizens and providing greater flexibility in

decision-making. Let us consider examples demonstrating approaches to centralization in different European countries.

France: high level of centralization with elements of decentralization. In France, the administrative system was initially built on the basis of a centralized model, which reflects the traditions of a great revolutionary country with a powerful centralized state power. Paris, as a political and economic center, continues to play a key role in the distribution of resources and the adoption of most important state decisions.

However, since the 1980s, France has implemented decentralization laws aimed at redistributing powers between central and local governments. These reforms have given local and regional authorities more autonomy, allowing them to manage and administer local budgets more effectively. It is important to note that despite significant decentralization, central government control over key aspects (such as the distribution of financial resources and key public administration functions) is still maintained.

Important elements of the French decentralization system are the two levels of territorial divisions: regions and departments. Regions have powers in areas such as education, transport, culture, and regional economic development. In addition, there are two types of local government: general local government and suburban local governments, which allows for greater flexibility and takes into account regional differences.

So, despite the decentralization in its country, France still faces the problem of maintaining a balance of powers between the central government and regional governments, and at times the system of governance is dominated by features of a centralized vertical.

Unlike France, Germany follows a federal model of government, which makes decentralization and delegation of powers much easier. The federal states (Bundesländer), including Bavaria, North Rhine-Westphalia and Hesse, have considerable autonomy in decision-making, and each federal region has its own constitution, parliament and government.

Germany, with its unique political structure, allows each region to make decisions and implement policies based on local realities, while key powers such as defense, foreign policy, health care and law enforcement remain under the central authority – the federal government.

One example of a successful federal model of governance in Germany is the system of division of responsibilities between the federal government and the state governments. Each of the federal states independently manages certain areas of society, including education, law enforcement, and other social and economic aspects.

So, the German system has several important advantages:

- In educational policy, each state decides which educational

programmes should be implemented in its schools and universities.

- In the area of infrastructure projects, regions can independently develop programs to improve transport, construction and planning of urban infrastructure.

- Regions can initiate changes in social policy, for example in the area of pension systems or social security.

This model is characterized by a balance between regional autonomy and unity at the federal level, which allows for an effective distribution of responsibilities between levels of government and greater flexibility in responding to local needs.

**Switzerland** is one of the clearest examples of the close connection between the system of governance and the cultural characteristics of a multilingual and multinational country. The country is known for its canonization policy, which means that almost all important issues, such as social programs, budgeting, education and health care, are decided at the cantonal level.

In Switzerland, each region has broad powers to govern and organize public life, allowing for the unique characteristics of individual regions and cultural communities to be taken into account. Although Switzerland maintains a federal system, it successfully combines elements of democratic participation at the cantonal level with uniform national political decisions, which contributes to the quality of decision-making within the framework of territorial self-sufficiency.

Spain has a system of autonomous communities, each of which has a certain degree of self-governing powers. This provides certain advantages in governance, when local problems can be solved autonomously within the framework of national standards. For example, in Catalonia and the Basque Country, the education system, social policy and local law enforcement are run by autonomous authorities, despite the presence of a single centralized government.

However, this model also leads to tensions in some regions where attempts have been made to increase autonomy against the backdrop of political instability and socio-cultural conflicts. This is especially evident in the desire of individual regions for greater independence, which sometimes threatens the stability and unity of the state.

Thus, the centralization models in European countries demonstrate a variety of approaches to governance, taking into account the specifics of each state. In some countries, such as France and Spain, a significant level of centralization is maintained, although with elements of local autonomy. In Germany and Switzerland, a successful federal system is practiced, which provides regions with a significant degree of self-government, which improves the quality of decision-making at the local level. These differences indicate that harmony between the central government and local self-government can only be achieved taking into account the historical, economic, cultural and social characteristics of each state (Table 4).

**Table 4. Comparative analysis of centralization processes**

| Element                 | Ukraine          | France                                    | Germany                      |
|-------------------------|------------------|---|------------------------------|
| Level of centralization | High             | High, but weakened by decentralization    | Low, federal structure       |
| Control over regions    | Direct from Kyiv | The center partially controls the regions | The lands have wide autonomy |

Source: Compiled by the author based on the research conducted

Since 2014, the process of decentralization has begun in Ukraine, which has become an important step towards reforming the state management system. This reform involves expanding the powers of local authorities in various areas, as well as increasing the level of financial independence of local budgets. Its goal is to improve the quality of local services, strengthen the independence of local structures and ensure more efficient distribution of financial resources.

An important part of the reform was the transfer of most state functions and powers to local administrations. The key point here is the principle of equality for all regions and the creation of self-sufficient territorial communities. This should help reduce the dependence of local administrations on the central budget and improve the ability to solve regional problems taking into account local characteristics and needs.

One example of successful transformations at the local government level is the creation of united territorial communities (UTC). This is a merger of local administrations with the aim of improving coordination and increasing the administrative and financial capacity of territorial units, allowing regions to have a greater degree of autonomy.

However, the process of decentralization and strengthening of local government requires time and close cooperation between the central government and local structures. In some regions of Ukraine, decentralization reforms face difficulties related to local political interests, lack of personnel, insufficient coordination and chronic lack of funding.

Despite the reforms implemented in recent decades, the Ukrainian system of governance remains partially centralized. The high dependence of the regions on the central budget and the rigid vertical power structure in the administrative system remain the main problems that hinder effective and flexible governance. Successful decentralization reform is one of the key ways to address these issues. However, it is important that the process of delegating powers to local authorities be accompanied by infrastructure development, increased financial autonomy of the regions and increased responsibility of local authorities. Then Ukraine will be able to overcome historical centralization and move towards a system of more flexible, people-oriented

governance that is effective

Decentralization plays a key role in the administrative systems of many European countries, as it allows regions and local authorities to effectively manage their territories and adapt policies to local needs. Within the framework of decentralization, territorial units receive more autonomy and the opportunity to develop and implement local solutions. Let us consider two striking examples: Germany and Sweden, where decentralization in different forms plays an important role in the governance system.

**Germany** is an example of a country with a federal system of government, where decentralization is implemented on the basis of a deep historical and political tradition. Within the federal structure, the country is divided into 16 federal states (Bundesländer), each of which has broad decision-making powers on key issues in various areas.

As stated above, the German system of decentralization ensures the distribution of powers between the federal government and the governments of the individual states. This delegation of powers, coupled with a high degree of autonomy, allows for more effective consideration of regional characteristics and needs, adapting decisions to local conditions. The federal states have their own governments, parliaments, and judicial bodies, which gives them independence in decision-making, policy development, and program implementation.

For example, each state government manages the school and university system, provides qualified teacher training and teaching staff in its region. Also, decisions on taxes and the distribution of the state budget are largely made at the level of the federal states, which allows for adequate regulation of local financial needs and stimulation of economic development of the territories.

The practical application of the decentralized approach in Germany also provides for a significant role for local governments in the process of forming local and regional policies. For example, at the federal state level, issues of road construction, transport and urban planning are regulated separately. This distribution of tasks between the federal government and the states contributes to more efficient governance and also creates political stability by adapting power to multi-tasking and different levels of power within the state.

Within the framework of federalism, the principle of solidarity between the federal and state levels is also highlighted. This principle is aimed at eliminating economic inequality between regions, providing assistance to economically weak states through the redistribution of financial resources at the federal budget level.

**Sweden** represents another model of decentralization, where responsibility for many functions previously associated with the central government has been transferred to municipalities and landstats (regions). Unlike Germany, Sweden uses a single-tier territorial system, where local decisions are made on a much larger scale,

and local governments play a major role in developing and delivering public services. Such reforms have made the country a model of successful decentralization in Scandinavia.

Sweden's strong decentralized system of government gives local authorities considerable powers in a number of areas. Key areas of local authority include education, health care and social welfare. These powers allow municipalities to develop local programmes to implement national standards in health care and education that meet the needs of their local areas.

Thus, each municipality in Sweden is responsible for the operation of schools and the education system, which includes both compulsory school programs and additional educational institutions, such as vocational training or advanced training courses. Such decentralization helps to flexibly adapt the education system to the specific characteristics of the local population, making education more accessible and better reflecting regional needs.

In the healthcare sector, local authorities are responsible for organizing medical institutions and ensuring citizens' access to basic medical services. For example, each municipal organization is responsible for organizing a network of hospitals, clinics, and other healthcare institutions, while the main financial support is provided through state tax revenues. Decentralization in this sector facilitates a deeper adaptation of the medical system to local needs and allows for an increase in the availability of medical care for the population.

An important aspect of decentralization in Sweden is the financial autonomy of municipalities. Local authorities are able to obtain a significant amount of funding through local taxes. The financial system provides municipalities with their own sources of income, including personal income taxes, which are distributed between the levels of government, and also gives local authorities control over the management of funds allocated for the provision of public services.

Sweden also makes extensive use of national approvals for key social programmes and policies, while leaving local authorities with considerable control over how they are implemented locally. This helps to balance the needs of the federal government with effective governance and development at the local level.

Decentralization in Germany and Sweden has its advantages, but it also presents challenges for public administration. In Germany, which has a federal system, maintaining a balance of powers between the federal level and local governments requires coordinated work at all levels of government, which can be difficult when dealing with regions that differ significantly in their levels of development and needs.

In Sweden, decentralization allows for active support for local community development and social protection for citizens, but there is a problem of uneven service provision across municipalities, as smaller municipalities may have difficulty

securing sufficient funding to develop and support social infrastructure. The balance between local autonomy and centralized program coordination remains an important challenge for the sustainability of social policy (Table 5).

**Table 5. Comparative analysis of decentralization processes**

| Element                   | Ukraine                            | Germany                                  | Sweden                                 |
|---------------------------|------------------------------------|--|--|
| Depth of decentralization | Partial, in the process of reforms | Full, within the framework of federalism | Deep, strong local government          |
| Financial autonomy        | Limited, central subsidies         | High, regions receive taxes              | High, significant share of local taxes |

Source: Compiled by the author based on the research conducted

In summary, decentralization in European countries such as Germany and Sweden has proven to be effective in improving the quality of services and the ability to make decisions that best meet local needs. It allows regions and municipalities to be more flexible in matters related to education, health care and social services. However, along with the benefits, decentralization also poses certain challenges, requiring a constant balance between the autonomy of local authorities and coordination at the national government level to ensure equality and solidarity.

**Electronic governance (e-Government)** is an important element of the modern administrative system, as it helps improve management efficiency, increases the availability of public services for citizens and reduces bureaucratic barriers. In Ukraine, e-government began to develop especially quickly after the launch of the Diia platform, which became an important step towards modernizing government services and reforming the administrative system. The development of digital technologies has made it possible to significantly simplify the interaction between government agencies and citizens, however, as in any other country, the Ukrainian experience of implementing e-government has its own characteristics and challenges.

One of the most significant steps for the development of electronic governance in Ukraine was the launch of the Diia portal, a central platform for providing public services online. Since its inception, the Diia project has begun to actively implement various digital services that significantly facilitate citizens' access to public services and ensure high speed and convenience of receiving them.

One of the key achievements of e-governance in Ukraine is the transfer of many administrative services to an online format. Previously, complex processes related to business registration, obtaining various certificates, filing applications and many other services required visiting government agencies. This often took a lot of time and created an additional burden for both citizens and civil servants.

With the development of the Diia platform, citizens have gained access to a range of services without having to contact government agencies:

- **Business registration:** the process has become much simpler and faster, with the ability to register a business online in a few clicks.
- **Obtaining government certificates:** Now many certificates can be obtained through the platform, which reduces waiting times and the need to visit the relevant institutions.
- **Submitting applications:** through the online platform, you can submit applications for obtaining documents or opening/closing businesses, which reduces errors and simplifies administrative processes.

The implementation of e-services also includes receiving more familiar documents in electronic form, such as:

- **electronic identity card;**
- **electronic driving licenses;**
- **electronic medical and tax certificates.**

All this reduces the burden on organizations and offices, speeding up the process of obtaining important information.

A key step in simplifying documents and ensuring the mobility of citizens has been the introduction of digital versions of the most important personal documents. In particular, through the Diia platform, citizens have access to a digital passport, which is a full replacement for a regular passport in most cases. This allows citizens to significantly reduce the number of papers they need to carry with them and speeds up identification processes. In particular, with the help of a digital passport, you can pass checks at checkpoints and interact with government services without having a physical document.

The same thing happened with driver's licenses, which can now be carried on a mobile device in the form of an electronic version. This provides convenience to drivers and allows government officials to quickly verify their eligibility without having to physically present documents.

The digitalization of other documents, such as student cards, diplomas, insurance policies and others, is generally a vector of continuing work towards simplifying administrative procedures. With the introduction of new technologies, there is no longer a need to store a significant number of paper documents, since all this can be received and stored electronically, while data security is ensured at a high level.

Despite the successful steps in the development of e-governance in Ukraine, there are several obstacles and challenges that the system faces:

**1. Digital divide.** One of the most serious barriers to the full implementation of e-governance is digital inequality. In Ukraine, there is a significant difference in the availability of technology, internet quality, and level of digital skills among different

social and age groups. In large cities, such as Kyiv, Odesa, or Lviv, the level of digital technology is much higher than in rural areas or small towns. People living in remote areas of the country often do not have access to a stable internet connection or the necessary devices to use online services. In addition, as of 2024, not all citizens are accustomed to using internet technologies, and there is a significant level of digital ignorance, especially among older people, which makes it difficult to use many e-services and increases the likelihood of errors when working with the platform.

**2. Low level of Internet penetration in remote regions.** Another problem is the low internet penetration in remote and rural areas. Due to the lack of stable broadband internet, many residents of such places cannot fully take advantage of the opportunities provided by the Diia platform, which reduces the overall effect of digitalization in the country. The lack of a quality connection limits access to electronic services and makes the system less universal and accessible to all citizens. In addition, digitalization requires systematic user training (especially in rural areas), training and improvement of skills in working with internet services, which also hinders the transition to fully digital governance at the national level.

**3. Cybersecurity vulnerability.** With the development of online services, the number of threats related to cybersecurity and personal data protection is also growing. Despite the efforts of the government and the efforts of the Diia platform to ensure security, hacking, phishing attacks and data leaks remain a danger that requires constant attention. Ukrainian specialists must pay great attention to the protection of personal data, especially in light of recent global threats from cyberattacks and international crime.

Thus, the Diia platform, despite the problems that arise, has made life much easier for Ukrainians, and its further development and expansion of functionality will contribute to the development of a more high-tech and insightful public service that will provide convenient access to administrative services for every citizen. Thus, Ukraine has made significant steps towards digital governance, but for its maximum effectiveness, it is necessary to address issues of digital inequality, improve Internet accessibility and train the population in modern technologies.

E-Government is actively developing in European countries and is an important tool for increasing the efficiency of state institutions, improving services for citizens and reducing bureaucracy. Different European countries approach the introduction of digital technologies into governance differently, depending on their traditions, level of technological maturity and political situation. Some countries, such as Estonia, demonstrate world standards in the field of electronic digital transformation, while others continue to face a number of problems that slow down the process.

Estonia is one of the world leaders in e-governance and is considered an example of successful implementation of digital technologies in the work of

government agencies. The country began actively developing electronic services back in the 1990s, and in the 2000s, it established a platform that allowed the entire country to become an online state. In 2021, Estonia once again confirmed its role as a world leader by opening access to more than 3,000 state and administrative services online for citizens and businesses.

Key achievements of Estonian e-governance:

**1. Electronic voting.** One of the most striking examples of Estonia's success is the e-voting system. Citizens of the country can vote in elections (parliamentary, local) via the Internet, which significantly simplifies the selection process and increases turnout. Since the introduction of the e-voting system in 2005, Estonia has become the first country to introduce such a mechanism for voting in elections. This is becoming not only convenient for citizens, but also an example for other countries wishing to improve citizen participation in democracy.

**2. Business registration and taxes.** Estonia also provides the ability to register a business online in a few minutes, with minimal time investment. This means that entrepreneurs do not have to visit bureaucratic institutions to register a company, which speeds up the creation and operation of a business. Thanks to the use of information technology, the country's tax system has allowed for the establishment of an online tax payment system, which helps reduce errors and make the process more transparent.

Estonia has also introduced a national ID card, which is the key to secure access to all public services and provides full digital identification of the citizen for online transactions. Government agencies, banks, tax authorities and even healthcare institutions use this identification to speed up the provision of services and comply with security standards.

Denmark is also an example of a highly developed e-governance system in Europe, but unlike Estonia, where the emphasis is on maximizing the simplification of processes, in Denmark the main emphasis is on the security and transparency of interactions between citizens and the state.

One of Denmark's most notable achievements is NemID, a digital identification system that provides citizens with safe and secure access to all public and private services. NemID allows Danes to log into online banking, sign legal documents, and interact with government agencies using only their ID code and password.

The NemID system provides multi-level security, being part of the state's overall plan to create a secure digital environment. This applies to tax returns, signing contracts with government organizations, contacting hospitals, state archives and registries. An important element is the possibility of an electronic signature, which significantly speeds up the process of document preparation, allows avoiding paperwork and solves the problem in terms of combating corruption.

Particular attention is paid to transparency in the work of government

agencies in Denmark. Platforms such as Borger.dk provide citizens with all the necessary government and administrative data online, available for monitoring and evaluation. This creates a dialogue between government agencies and citizens, and also affects the increase of citizens' trust in government institutions, minimizing the risks of administrative corruption.

Despite its high level of technological development, Germany faces certain difficulties in developing and integrating its e-government system. Germany has a federal structure, which creates additional difficulties for the unification of e-services at the national level. This leads to the fact that the implementation of a single platform and the unification of the e-government system among the regions is a complex process. Each federal state authority has its own online platforms and interaction procedures, which slows down overall progress.

However, Germany has successfully developed digital identification of citizens through the Personalausweis (digital ID card) system and also uses platforms that have significantly improved the application procedures for social benefits and health insurance.

A recent analysis has shown that digitalization in Germany is progressing more slowly than in other EU countries, due to insufficient coordination between federal and state authorities, as well as technical problems related to data security and the interaction of old information systems with new technologies. Thus, despite significant progress in Germany in certain aspects of e-governance, the country's public administration system needs to be more coordinated, accelerate digitalization processes and improve the quality of citizens' access to digital services throughout the country.

These examples clearly show how e-governance affects the efficiency and convenience of interaction between citizens and the state. Estonia continues to be a world leader in the use of innovative technologies, which significantly improves public opinion about the quality of administrative services. Denmark places emphasis on security and transparency, which are also highly valued by citizens. At the same time, Germany, with its strong technological base, faces challenges related to a decentralized system of governance (Table 6).

**Table 6. Comparative analysis of e-Government**

| Element                     | Ukraine                | 4               | Denmark         | Germany      |
|-----------------------------|------------------------|-----------------|-----------------|--------------|
| Availability of services    | High, thanks to "Diya" | Almost complete | Almost complete | Partial      |
| Digitalization of documents | Partial                | Complete        | Complete        | Partial      |
| Problems                    | Digital Divide         | No              | Overcome        | Slow reforms |

Source: Compiled by the author based on the research conducted

Thus, Ukraine and European countries demonstrate different approaches to key elements of governance. While Europe is predominantly focused on decentralization and the introduction of advanced technologies, Ukraine is still at the reform stage. Further development is possible due to integration with the EU and borrowing successful governance practices.

## **1.2. General characteristics of the IT market and its key trends**

Information technology today occupies a central place in the development of the global economy, social processes and everyday life. The modern IT market is a dynamically developing industry that includes many segments - from the production of hardware and software to services in the field of cloud computing, artificial intelligence, cybersecurity and digital business transformation.

In recent years, the IT market has undergone significant changes due to technological progress, changing user demands, and global economic and social challenges. Today, the IT market is a set of all economic relations and processes related to the development, production, distribution, and use of information technologies and products based on them. It includes the following key segments:

- **Hardware**– servers, computers, network equipment, mobile devices.
- **Software**– operating systems, application programs, corporate solutions, games.
- **IT services**– consulting, systems integration, technical support, outsourcing.
- **Cloud technologies**– cloud platforms, SaaS (software as a service), IaaS, PaaS.
- **Cybersecurity**– data protection tools, information security systems.
- **Artificial Intelligence (AI) and Machine Learning (ML)**– technologies of data analysis, automation and robotics.

According to analytical agencies, the global IT market is showing stable growth at an annual rate of about 7-10%, which is associated with the growing demand for digitalization in various sectors of the economy - from industry and finance to education and healthcare (Fig. 1).