

Lunyak V. - Postgraduate student of the Classical Private University, Zaporizhzhia

ORCID: 0000-0002-3469-3680

DEVELOPMENT OF STATE POLICY MECHANISMS IN THE SPHERE OF DIGITALIZATION OF INNOVATIVE ACTIVITIES IN UKRAINE

The directions of the development of public management mechanisms in the field of digitalization in Ukraine from the standpoint of ensuring innovative activity have been determined. Among these directions, knowledge management, big data management, effective and balanced use of digital technologies, etc. are singled out. It has been established that there are several options for the development of public administration in the field of digitalization (centralized, decentralized, etc.). It was revealed that Ukraine is primarily characterized by centralized management. Evidence of this is the functioning Ministry of Digital Transformation of Ukraine, which is the central body of executive power in the relevant field. This authority sets the tone in the development of the national system of public administration at all its levels. At the same time, the work identifies the need to improve the concept of digital development of the public administration system in Ukraine.

Keywords: *public administration, mechanisms of public administration, digitization, innovative activity, information provision, Ukraine, centralized and decentralized administration.*

Problem setting. In modern scientific research in economics, much attention is paid to approaches and methods of information support for the innovative activities of business entities. The change in the phase of socio-economic development from industrial to post-industrial (information) identified intangible intellectual assets as the main driver of

economic growth. From the middle of the 20th century. In the structure of GDP of developed countries, information types of economic activity predominate. Industrial production of consumer goods was transferred to regions with cheaper industrial production resources. At the same time, the creation of intellectual assets by business entities in developed countries has been expanded many times over.

Recent research and publications analysis. Organizational, legal, economic and other aspects of the formation and implementation of state policy in the conditions of digitalization were studied in the scientific works of scientists L. Anaya, L. Antonova, O. Borysenko, M. Castells, L. Gren, O. Gromyko, A. Davidson, S. Nambisan, N. Nasir, A. Pomaza-Ponomarenko, Yu. Ulyanchenko, A. Khaletska, E. Shchepansky, and others [1; 4–11].

Paper objective. The purpose of the article is to analyze the direction of development of public management mechanisms in the field of digitization in Ukraine.

Paper main body. The trend of informatization and digitalization of society is increasing its influence on economic growth and improvement of the public administration system, as a result of which a new source of growth has been identified - information resources and digital technologies. The relevance of the tasks of information support for innovation activities is increasing, since they involve the effective transfer of content (information) for use in the process of creating innovations. Information support and digitalization includes technologies and methods of using available information resources from external and internal sources.

Resources of innovative activity are located in the external environment, access to which is organized independently by the economic entity and the subject of management through information support. Thus, through technologies, methods and means of information support, the subject uses the most important information resources of the innovation environment to create effective innovations (Fig. 1).

Trends in the globalization of the economy, the growth in the volume of digital data in the public sector, and the intellectualization of their processing are expanding the

innovative environment, for interaction with which appropriate information support is required [1; 2].

Methodological approaches to information support for innovation activities have been taking shape since the early 1980s. Until this time, the tasks of accessing and using information and data were not separated from other tasks of the enterprise, but were solved together with them.

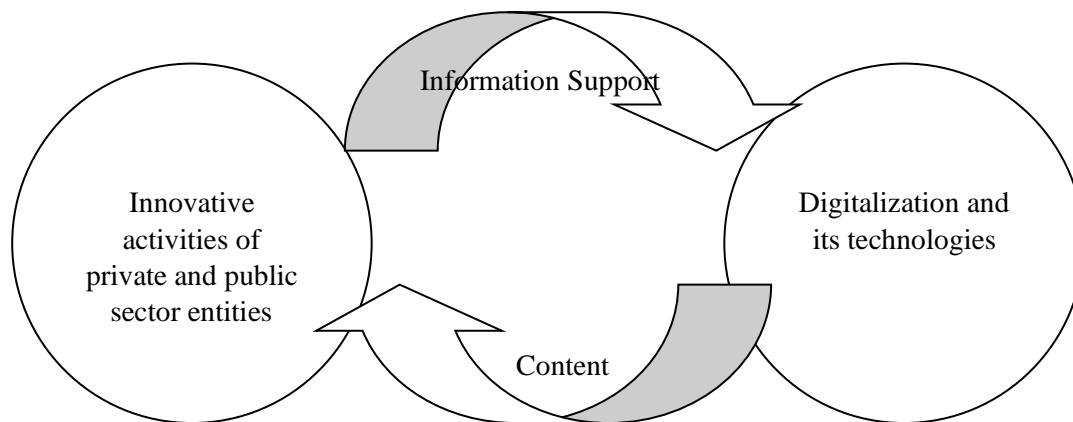


Fig. 1. Information support as a link between the public and private sectors, the innovation environment and digitalization

Source: author's development

As is known, the methodological approach to information support combines technologies and methods to satisfy its information needs.

Information resources began to be created long before the advent of computers and global telecommunication networks in their modern form. By the middle of the 19th century. Possession of information is becoming critically important for business entities and regions and their authorities as a whole.

In the economy of that period, the need for access to sources of information was formed due to the rapid development of science, technology, social and economic relations. As a result, a new scientific discipline was born - computer science. The beginning of the development of the theory of information management dates back to the 1970s, when the importance of information resource management for society and the

economy was first announced at the government level. In 1977, a report to the US Congress stated that “information cannot be considered a public good like air and water. Government must recognize that information and its use have a value, so information resources must be managed as professionally as financial or human resources” [4–5].

The first piece of legislation in the field of information management was the Paperwork Reduction Act of 1980, which was subsequently continued in the Paperwork Reduction Act of 1995 and the E-Government Act of 2002, which sets out government policy in the field of management information resources, and also fixed some terms. Information resource management is the process of managing information and data aimed at achieving the mission of the organization, increasing the efficiency of its work, including also reducing the burden on management bodies to collect information [1; 7–8].

For more than three decades, generally accepted terms have been developed in scientific theory and practice, and the most important functions of information support have been identified. In accordance with the main tasks that information support solves, methodological approaches have been developed. Let's consider some methodological approaches to information support for business entities and government bodies, for which the main activity is related to information technology, higher and additional professional education.

1. Management of information systems design. The main tasks solved using the approach are to create an automated technology for processing structured data in a specific subject area. These tasks are solved on the basis of the design of automated information systems, databases, and the development of telecommunications infrastructure. Currently, the most important issue in information management is access to the necessary information from external sources and its effective use [2; 10].

2. Management of information resources (information management). The main task is to organize information support for the decision-making process in the company in such a way as to provide all the necessary information and ensure the effective accumulation and use of information resources.

3. Knowledge management. In the early 1990s, an approach was proposed in which information occupied a central place, and the main driving force and resource for the economic development of an economic entity were people whose work consists of creating knowledge based on it and its subsequent use.

The purpose of knowledge management is to provide conditions for knowledge generation, accumulation, transfer and use. The lack of fundamental differences between the concepts of “information” and “knowledge” leads to the fact that many knowledge management projects are based on an information system [1; 4–9].

According to the observations of scientists, knowledge management relies on information resource management for the following reasons:

a) the implementation of knowledge management projects implies possession of meta-information about where this knowledge arises and in what sources it is reflected, i.e. knowledge of the information resources themselves;

b) knowledge management involves the translation of a person’s personal knowledge into forms of information representation that are accessible to other people, i.e. in the form of a document;

c) the task of knowledge dissemination is one of the most important in knowledge management. However, knowledge presented in the form of information (document) becomes part of the information resource and is distributed as an information resource.

Knowledge management also has specific functions, such as providing conditions and opportunities for creating new knowledge, generating information about it, i.e., translating it into a form of information accessible to other experts.

4. Big data. The big data approach is used to process digital data in real time to speed up the innovation process. Currently, this is one of the leading digitalization trends, which is discussed in the first chapter [1; 4–9].

Each of the above approaches builds on methods and technologies created previously. A study of approaches to information support for the work of the public and private sectors shows the transformation of the information needs of innovation activities. If at first it was necessary to systematize and organize work with information and data

that was accumulated by the business entity itself and the government body in the course of their activities, then later approaches are aimed at working with external information resources.

The activities of the public and private sectors, regardless of their size and types of activities, are accompanied by numerous information flows, which include information from internal and external sources. In this regard, we believe that the development of the public administration system in Ukraine should be accompanied by a balanced use of digital technologies and information resources. Internal information mainly contains information about the state of the management entity itself, its resources and processes. External information is information about scientific achievements, the state of the economy, consumers, competitors, legislation, news, namely information about changes in the external environment [2; 10].

Tools for managing internal information flows based on modern computer and telecommunication technologies are actively being developed by IT companies and relevant authorities (the Ministry of Digital Transformation in Ukraine). Internal information resource management systems are aimed at automating the company's document flow and include a software package that allows you to collect information, process and analyze it, distribute it and apply it in the activities of the entity. The goal of document automation is, as a rule, to increase the efficiency of administrative business processes.

An important element of public management is the streamlining of its internal information processes. Creating an effective information exchange system significantly speeds up the process of decision-making and finding solutions to operational problems. The current state of the IT infrastructure and digitalization of the public administration system is sufficient for information support of the innovation process, capable of providing access to the most important resources of innovation. Information support for innovative activities of the public and private sectors can be implemented according to a decentralized, centralized or mixed scheme [1].

The decentralized scheme assumes that each department or individual employee independently organizes access to the data and information they need (Fig. 2).

A decentralized scheme for organizing information support can be implemented in accordance with the organizational form of management (linear, functional, project/product, mixed, etc.). This scheme is characterized by scattered storage of information resources, unformalized information processes and relationships between employees and their departments. As a result, the main disadvantages of the decentralized scheme for organizing information support clearly appear:

- irrational use of funds to acquire access to information resources;
- lack of a systematic understanding of the information needs of business units and available information assets;
- duplication of functions related to information support [4–9].

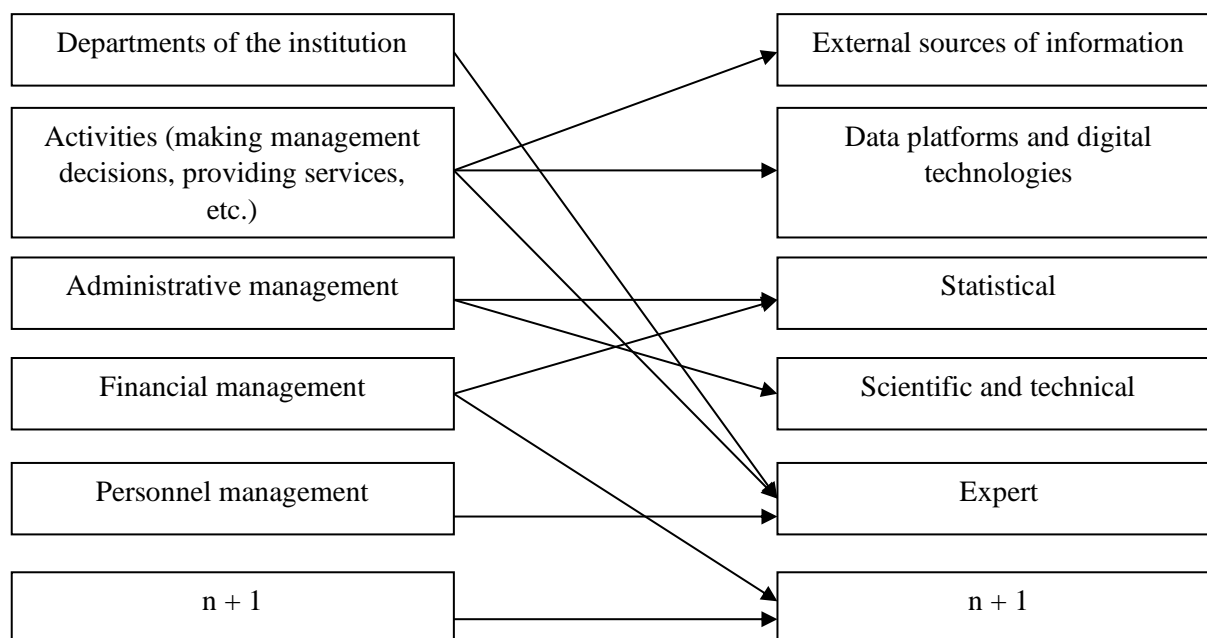


Fig. 2. Decentralized scheme of information provision in the system of public administration in conditions of digitalization and innovation

Source: author's development

A centralized information support scheme presupposes the presence of an information center in which systematic processing of information needs is carried out,

selection of necessary sources of information, selection and organization of the most rational way to access them and provision of departments and employees with access to information resources (Fig. 3).

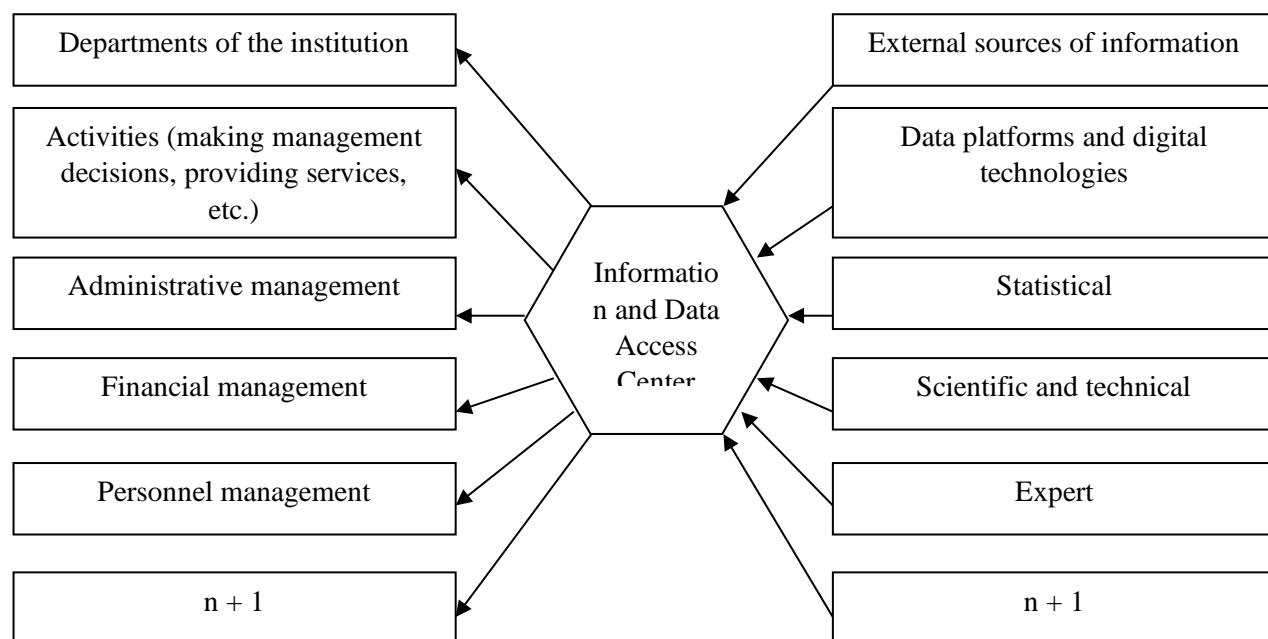


Fig. 3. Centralized scheme of information provision in the system of public management in conditions

Source: author's development

A centralized information support scheme allows you to organize the efficient use of information resources and reduce the cost of purchasing access to them. In Russian practice, divisions providing information services to internal users and organizing access to external information sources exist in large companies, educational and scientific organizations.

A centralized information support scheme allows you to organize the efficient use of information resources and reduce the costs of acquiring access to them. In domestic practice, departments that provide information services to internal users and organize access to external information sources exist in large companies, government agencies, educational and scientific organizations.

So, in information support, the organization of work with sources of external information and data is of great importance. The volume of information from external sources in the economic activities of business entities first increased gradually, and then exponentially.

The need for external information expanded under the influence of the following factors:

- development of integration processes in the global economy;
- growing need for independent sources of reliable information caused by an increase in the number of subjects of scientific and research activities, and sources of scientific information;
- increasing the volume of accumulated information and data.

Conclusions of the research. Thus, advances in the field of IT have provided the conditions for the creation of a unified information space in the public and private sectors. The modern information space of Ukraine presents a variety of information resources and options for accessing them. A significant amount of information is freely available, but its use also requires an appropriate approach to information support. Moreover, the innovations of recent years (the creation of the “Diya” platform, the provision of the opportunity to submit electronic petitions, and so on) set the tone for the further development of the public and chat sector in Ukraine. Among the areas of development of these sectors are knowledge management, information resource management, and so on.

The thematic division into development vectors that has developed in the information support of the public and private sectors is due to the fact that each type of information activity required possession of the appropriate competence, methodology and means. At the same time, the stage of preparing an information resource associated with the collection and formation of databases was the most expensive and labor-intensive. The tasks of adapting an information resource to customer requirements, creating services and tools for working with huge amounts of data, as well as promoting them to the market were carried out by specialized services. It has been established that in Ukraine, such a

service is essentially the Ministry of Digital Development. At the same time, the further development of the public administration system in Ukraine requires the improvement of its mechanisms from the standpoint of stimulating the development of innovative activities. Ensuring such a process is very important for our country in the context of lagging behind in development from other countries. On this basis, we propose to improve the concept of digital development of the public administration system in Ukraine.

References:

1. Drucker, P. Business and innovation. Peter F. Drucker. 2009. 432 p.
2. Onoprienko, V. Internet and science in a globalized world: Manuel Castells. Internet galaxy. Marketing for the Internet, business and marriage. Per. from English K.: "Vidavnistvo "Vakler", 2007. 304 p.
3. Pomaza-Ponomarenko, A.L., Taraduda, D.V. Foreign evidence of ensuring social security through the sustainable functioning of critical infrastructure and advanced security // Science and technology today. 2024. No. 4 (32). pp. 371-384.
4. Anaya L. An Investigation into the Role of Enterprise Information Systems in Enabling Business Innovation / L. Anaya, M. Dulaimi, S. Abdallah // Business Process Management Journal. 2015. Vol. 21. N 4. P. 771–790.
5. Castells M. The new public sphere: Global civil society, communication networks, and global governance // The Annals of the American Academy of Political and Social Science. 2008. Vol. 616, no. 1. P. 78–93.
6. Nambisan S. Digital Innovation Management: Reinventing innovation management research in a digital world / S. Nambisan, K. Lyytinen, A. Majchrzak, M. Song // Mis Quarterly. – 2017. – Vol. 41. – No. 1. – pp. 223-238.
7. Nasir N. Smart Nation and Digital Government Group Office to Be Formed under PMO. 20.03.2017. URL <https://www.gov.sg/news/content/smart-nation-and-digital-government-group-office-to-be-formed-under-pmo>.

8. Nica E. ICT Innovation, Internet Sustainability, and Economic Development / E. Nica // *Journal of Self-Governance and Management Economics*. 2015. N 3(3). P. 24–29.
9. Pomaza-Ponomarenko A., Hren L., Durman O., Bondarchuk N., Vorobets V. Management mechanisms in the context of digitalization of all spheres of society // *Revista San Gregorio. SPECIAL EDITION-2020. Núm. 42* . URL: <http://revista.sangregorio.edu.ec/index.php/REVISTASANGREGORIO/issue/view/RSAN42/showToc>.
10. Pomaza-Ponomarenko A., Kryvova S., Hordieiev A., Hanzjuk A., Halunko O. Innovative Risk Management: Identification, Assessment and Management of Risks in the Context of Innovative Project Management // *Economic Affairs (New Delhi)*. 2023, 68(4), pp. 2263–2275. DOI: 10.46852/0424-2513.4.2023.34. URL: <https://ndpublisher.in/admin/issues/EAv68n5z8.pdf>.
11. Pomaza-Ponomarenko A., Taraduda D., Leonenko N., Poroka S., Sukhachov M. Ensuring the safety of citizens in times of war: aspects of the organization of civil defense // *AD ALTA: Journal of Interdisciplinary Research*. 2024. Volume 14. Issue 1. Pp. 216–220. URL: https://www.magnanimitas.cz/ADALTA/140139/papers/K_10.pdf.

Received: 03.04.2024
Accepted: 21.05.2024
Published: 27.06.2024