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# Methods for evaluating economy information potential

## Métodos para evaluar el potencial de información de la economía

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#### ABSTRACT:

Information is considered to be one of the main resources in the modern economy. In this regard, information potential is referred to as a factor for assessing the prospects and investment attractiveness of the economy. In our research, we discuss the methods for assessing information potential at different levels: institutional, regional and state. We have briefly described the advantages and disadvantages, as well as the areas of application of information potential assessment methods for each level. It has been found out that the main disadvantage of the existing methods for assessing information potential is the fact that they are focused on only one level, which is not considered in the "enterprise-region-state" system the information economy development.

**Keywords:** Information potential, informatization, public policy, assessment methods, indicators.

#### RESUMEN:

La información se considera uno de los principales recursos de la economía moderna. A este respecto, se hace referencia al potencial de información como un factor para evaluar las perspectivas y el atractivo de la inversión. En nuestra investigación, discutimos los métodos para evaluar el potencial de información a diferentes niveles: institucional, regional y estatal. Hemos descrito brevemente las ventajas y desventajas, así como las áreas de aplicación de los métodos de evaluación de potencial de información para cada nivel. Se ha descubierto que la principal desventaja de los métodos existentes para evaluar el potencial de información es el hecho de que se centran en un solo nivel, que no se considera en el sistema "empresa-región-estado" el desarrollo de la economía de la información.

**Palabras clave:** potencial de información, informatización, políticas públicas, métodos de evaluación, indicadores

## 1. Introduction

At the present stage of society development, information is not only a valuable resource, but also a production factor. Nowadays, there is an unprecedented impact of science and new technologies on the socio-economic development of all countries. The level of country's development is determined by the availability of cutting-edge information technologies being used in biotechnology and medicine, as well as in the development of innovative medicines, the creation and distribution of new materials, transport, space exploration, communications, financial intermediation, military, etc.

Modern economic relations are characterized by qualitative changes. Today, the information production is of primary importance rather than the material. This development stage is

characterized by the growth of information, knowledge and information technology in public life; increased number of people employed in information and communication technologies and the production of information products and services in the gross domestic product of the countries; the growing informatization of social and economic relations through the use of modern digital technologies; the creation of a global information space ensuring effective interaction of people, their access to the world information resources, as well as the satisfaction of their needs for products and services.

New technologies have quickly and fundamentally changed the structure of the world economy: information technologies are of national importance as they form the information potential of the country. Thus, there is a need for new indicators showing the technological and information development of the countries, including their information potential.

Until recently, information potential was referred to as part of the economic potential of an individual enterprise. But due to the fact that information security is becoming one of the factors ensuring state security, it must also be considered at the regional and state level. Modernization of information potential assessment methods at all hierarchical levels is an urgent task.

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## 2. Literature review

Bates was the first to consider information as an economic good (1990). It is noted that the nature of information makes it difficult to evaluate and consider it as an economic good.

The information potential of individual enterprises, industries, individual business processes or information phenomena is often considered in foreign scientific literature (Gorelik & Koroleva, 2016). Currently, the information potential of an individual company is referred to as the availability of IT (Information Technology) infrastructure (set of physical devices and software applications that are required to operate the entire enterprise), IT knowledge and IT operations within the company (Geers, 2008). It is noted that the information potential of individual companies can be determined by informatization of business processes, implementation of data processing systems, for example, ERP- systems (Rus, 2012) or mobile ticketing (Li et al., 2009). It has been found that companies implementing advanced technologies are more likely to achieve higher productivity and profitability (Lin, 2007; Ong & Chen, 2013; Brockbank et al., 2018).

The lack of a clear methodological framework for assessing the information potential of an individual company, industry or region is a serious difficulty in planning and managing informatization processes. (Ashmarina et al., 2016). Currently, research on the information potential assessment and the assessment of enterprise information systems mainly consists of a description of the information potential of an enterprise, as well as the methods for its improvement (Zhu & Li, 2015). Various models are used to assess the information potential. For example, in (Turulja & Bajgorić, 2015), they interviewed the company's managers and built structural equations in order to assess the relationship between the information potential of a company, firm innovativeness and business efficiency. A model based on fuzzy inference system for determining the information potential of an enterprise is proposed in (Zhu & Li, 2015). The results of an empirical study in the Spanish IT consulting and telecommunications sector are presented in (Devece et al., 2017). Based on this, it was found that there is a positive relationship between the level of the information technology implementation in the company and its performance indicators: competitiveness, productivity and customer satisfaction. In (Zárraga-Rodríguez & Alvarez, 2013), there is a model defining the ways in which the potential of information management along with other indicators (integration, flexibility and reconfiguration) can become a competitive advantage.

Russian researchers (Rusakova, 2006) propose to assess the information potential of an enterprise through the system of group integral indicators, where information transparency, possibility of integration into the external information space, availability of information resources, as well as their level of development and the quality of information support are the main indicators.

The most developed methodology for assessing the information potential is the methodology proposed in (Chernyshova, 2012) and supplemented in (Adamadziev & Rabadanova, 2013). The evaluation system consists of 5 units; each of them contains certain indicators:

- effectiveness unit (timeliness of the information requested or provided (technological operations), the degree of relevance, reliability and impact of information on the production);
- qualification unit (the share of expenditure on training personnel to work with new information resources in the total training expenditure, provision of the enterprise with qualified personnel, information literacy of personnel);

- innovative unit (the share of domestic expenditures on research and development and the acquisition of information technology in the total expenditure on production and updates of the information technology used in the production process);
- organizational unit (availability of a corporate website and corporate information network, resilience of the enterprise information system to information noise, reliability of the enterprise information system, adequate number of the IT department personnel);
- resource unit (availability of personal computers and programs with due regard to their importance, the quality of software).

At the present stage of society development, there has been gained some experience in using information technologies at the level of cities, regions and countries. In this case, the information potential is considered in the context of the potential of the whole region. Thus, in (Van Den Berg & van Winden, 2017), the information potential of Eindhoven, Helsinki, Manchester, Marseille and the Hague was analyzed. The importance of information and communication technologies in improving the tourist attractiveness of the cities and the life of the residents was also shown.

In (Zhu & Li, 2015), a system of indices is presented in order to evaluate the potential of information and technological innovations in the region. The indices are structured in 5 groups and include both indicators characterizing the population and enterprises, for example, the number of inventions and patents, the number of employees, colleges and universities, etc.

Russian researchers (Fomin, 2009) propose the following indicators for the assessment of the information potential of the region: the share of expenditures on the development of information technologies; expenditure on new information technologies per social employee; cost of computing machinery in the cost of fixed assets; the number of telephones per 100 residents; the share of the working population engaged in the information sector of social production; the share of computers in the local and corporate computer networks, as well as the share of personal computers connected to the Internet in the total number of computers in social production; the number of computers per 1000 people engaged in social production. In (Ashmarina et al., 2016), there are 45 indicators for assessing regional information potential. The indicators are classified into 5 groups: indicators of the level of information technologies (IT); economic performance indicators based on the use of information and communications technology within the company; technical safety indicators for informatization processes; indicators of the use of global information networks, as well as specialized information programs; labor performance indicators. An integral indicator of regional informatization is also proposed. This is the level of development which is calculated as the sum of these indicators, taking into account the weighing coefficients.

A significant number of different indices and indicators have been developed so far. They are used for a comparative analysis of the development of different countries in the field of the information society, the economy of knowledge, the introduction of e-government technologies, the use of information and communications technologies in culture, etc. For example, these indicators include the Transparent Communication Indicator, which was developed by experts from the National Science Foundation of the United States (NSF) in order to assess the use of ICT in the interaction between all categories of the population, business, entrepreneurs, and the authorities both with each other and within each individual category (Shtrik, 2002). Another indicator is the Information Society Status Indicator (IS index), which measures national information capabilities and information capital. This index takes into account 23 indicators, which are divided into four groups: computer infrastructure, information infrastructure, Internet infrastructure and social infrastructure (Shtrik, 2002).

Despite a great number of studies, the problem associated with the model for assessing the information potential of the state has not been properly addressed. For example, models for assessing state information potential have not been presented. Researchers understand the importance of the issue. But, unfortunately, the information potential of the state is considered only in the context of protection against unauthorized access to state information, that is, its information security (Geers, 2008).

Thus, we can conclude that the considered approaches only define common criteria or extrapolated indicators in the assessment of a separate information potential component. At the same time, these methods are quite simple and universal, but the assessment parameters are fuzzy and do not define the measurement unit and the standard value of the information potential.

Thus, it can be noted that the problem of information potential is relevant. It has not sufficiently developed in the scientific literature. Nowadays, there is no comprehensive study considering the

information potential of individual enterprises or companies as part of the information potential of a region or a country as a whole.

The aim of our research is to analyze the methods for assessing information potential and to develop the indicators for its integrated assessment at the three hierarchical levels: enterprise, regional and state.

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### 3. Research methods

The research is based on the data presented in the publications of practitioners and market experts. We used the methods of analysis, synthesis and generalization to assess the information potential at the three levels: enterprise, regional and state.

The following algorithm was used to assess the information potential at each level:

1. Determination of the components of the enterprise information potential. Differentiation of the level of the enterprise information potential into four different areas: current state, trend analysis, the efficiency of the information potential components, information capacity and promotability of the product being produced.
  2. Determination of the indicators for each information potential component.
  3. The choice of values of indicators for each component.
  4. Analysis of general trends in the information potential development.
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### 4. Research results

In the information age, the information potential should be considered systematically and consistently, from an individual enterprise to an information company in the region and the country as a whole. Thus, a comprehensive assessment should be performed on a step-by-step basis. The data determining the information potential are the initial data for the assessment.

Due to the fact that the information potential in all stages is assessed both in quantitative and monetary terms, the indicators at the level of the enterprise and the region should be presented as follows:

$$IP(\text{enterprise, region})=Q+M \quad (1)$$

where Q is the quantitative component, M is the monetary component.

The state information potential will be determined by the following formula:

$$IP(\text{state})=Q+M_{-\Delta} \quad (2)$$

where Q is the quantitative component, M is the monetary component,  $-\Delta$  is the improved position of the state in various rating systems.

#### 4.1. Assessment of the enterprise information potential

Summarizing scientific developments, we should note that the indicators related to the number of computers, the Internet connection etc., are used when assessing information potential (Chernyshova, 2012). We believe that it is inappropriate to focus on these indicators, since nowadays any activity is impossible without the introduction of information systems and the use of computers. Regardless of the industry, it is necessary to focus on the information capacity and promotability of the product being produced rather than on the provision of information systems and computers.

In view of the above, the qualitative indicators for information potential assessment are:

- Production of a high-tech domestic product;
- Use of domestic software and hardware;
- Participation in public tenders;
- Availability of patents and articles in scientific databases.

In this stage, enterprises must be classified according to their activities. For example, it is inappropriate to assess the information capacity and promotability of the generated information product in terms of profitability (for example, a non-profit scientific research institute or a library may have a much greater information potential than a company specializing in websites). The ground for assessing the information capacity of products are the characteristics determining the degree of progressiveness (novelty) and usefulness of the research and development (R & D)

results, namely the criteria of novelty, scientific and practical relevance, objectivity, evidentiality and accuracy. The degree of compliance with the criteria is expressed through the specific indicators – quantitative (number of inventions, patents, licenses, etc.) and qualitative (fundamentally new information, compliance with the world scientific and technical standards, etc.).

The enterprise information potential can be defined as follows:

$$IP(\text{enterprise, region})=Q(\text{enterprise})+M(\text{enterprise}) \quad (3)$$

where  $Q$  is the quantitative value of the “ $Q$ ” indicator,  $M$  – the monetary value of the “ $M$ ” indicator.

The definition of the monetary and quantitative components of the indicators is shown in Table 1.

**Table 1**  
Monetary and quantitative components of the enterprise information potential indicators

<b>Indicator for information potential assessment</b>	<b>Monetary component</b>	<b>Quantitative component</b>
Production of a high-tech domestic product	Export volume of projects and developments	Number of a high-tech domestic product
Use of domestic software and hardware	Savings associated with the use of domestic software and hardware	Number of domestic software and hardware products
Participation in public tenders	Extent of financing of the won tenders	Number of tenders won
Availability of patents and articles in scientific databases	Funds received from the sale of patents, scientific developments, etc.	Number of patents of the Russian Federation and other developed countries, number of articles in such journals as Scopus Q1-Q2.

It is important to monitor the quantitative data dynamics in order to determine the development trends of information potential. Thus, it is possible to determine the development trends of the information potential of an enterprise. The introduction of modern information technologies and the increased informatization of production and management processes can lay the groundwork for a long-term increase in the enterprise performance, strengthen its competitive position in the market, as well as ensure the necessary level of information security. At the same time, the personnel of the enterprise is one of the most important factors for the effective formation and use of information potential. It is obvious that in the coming decades, the information potential of an enterprise, including pharmaceutical companies, will be increasingly affected by its ability to identify, accumulate and develop knowledge, creating innovative medicines and technologies, and later long-term competitive advantages. The components for assessing the information potential of a pharmaceutical company may include theoretical knowledge of specialists, as well as the results of scientific research (formulated hypotheses, concepts; developed projects, algorithms, programs, technologies; discoveries, inventions and rationalization proposals; published articles, reports, monographs, educational and methodical manuals, instructions, etc.).

## 4.2. Assessment of the regional information potential

The information potential of the region is the most important component of its technical, technological and management framework. It is a combination of organizational, technical and informational capabilities necessary to ensure the preparation and adoption of management decisions. When assessing the information potential, it is necessary to pay attention to various domestic projects.

The information potential of the region should be based on the potential of all enterprises in the region, as well as the availability and implementation of regional information projects and technologies:

The information potential of the region can be defined as follows:

$$IP(\text{region}) = \left( \sum_{j1=1}^{m2} Q_{(\text{enterprise})_{j1}} + \sum_{j2=1}^{m2} Q_{(\text{region})_{j2}} \right) + \left( \sum_{k1}^{p1} M_{(\text{enterprise})_{k1}} + \sum_{k2=1}^{p2} M_{(\text{region})_{k2}} \right) \quad (4)$$

where IP (region) is the sum of the monetary and quantitative indicators of individual enterprises and regional projects.

In this stage of the information potential assessment, it is necessary to determine the following indicators of regional projects: the availability of regional electronic document management systems, information and communication technologies for solving administrative tasks of administrative entities; massive open online courses (MOOC's) for further training; the use of internal integrated information technologies, making it possible to use multimedia, textual and graphic information at the same time.

The definition of the monetary and quantitative components of the indicators of the regional information potential is presented in Table 2.

**Table 2**  
Monetary and quantitative components  
of the regional information potential

<b>Indicator for assessing the information potential of regional projects</b>	<b>Monetary component</b>	<b>Quantitative component</b>
Regional electronic document management systems	Scope of tasks solved with the use of these systems; savings after the introduction of electronic document management systems	Number of regional electronic document management systems
Information and communication technologies for solving administrative tasks of administrative entities	Scope of tasks solved with the use of these systems; savings after the introduction of the systems; improved communication between the authorities and the population of the region	Scope of tasks solved with the use of these systems
Development and implementation of educational and scientific information projects, for example, massive open online courses (MOOC's) for further training	Savings after the introduction of the systems	Number of people who took these courses
Use of domestic integrated information technologies, making it possible to use multimedia, textual and graphic information at the same time	Savings after the introduction of the systems	Number of domestic integrated information technologies
Use of intelligent information systems based on expert assessment systems for regional tenders; monitoring and promotion of the introduction of advanced technologies by higher educational institutions, research institutes, etc.	Savings after the introduction of the systems	Number of domestic integrated information technologies

The implementation of educational information projects is particularly important. The "Public Libraries of St. Petersburg" project is worth mentioning. It provides a centralized search of more

than 16 million publications kept in 198 public libraries of St. Petersburg. The user receives the information on the availability of books and their storage location; it is also possible to book and order the delivery of publications or extend the term of their use. In addition, there is a poster of all the events taking place in the libraries of the city.

The importance of the introduction of various environmental information projects should also be noted. For example, the "Forest watch" system, which is designed for automatic and timely detection of forest fires and their coordinates. The operation of the system is based on the video cameras located on the towers of telecommunications providers.

### 4.3. Assessment of the state information potential

The information potential of the state should be based on the information potential of all enterprises, regions, as well as the availability and implementation of national information projects and technologies:

The information potential of the state can be defined as follows:

$$IP(state) = \left( \sum_{j3=1}^{m3} Q_{(state)j3} + \sum_{j2=1}^{m2} Q_{(region)j2} \right) + \left( \sum_{k3=1}^{p3} M_{(state)k1} + \sum_{k2=1}^{p2} M_{(REGION)K2} \right) \quad (5)$$

where IP (state) is the sum of the monetary and quantitative indicators of individual enterprises (as part of regional indicators), state and regional projects.

In this assessment stage, it is necessary to identify government projects contributing to state information security. It is impossible to protect the country's information security without a domestic information product. Such products are considered as indicators characterizing the information potential of the state.

In the information warfare, it is important to ensure a high security level of the information potential of the country which includes all confidential information, the results of intellectual work available to society and the state through the media and telecommunications, archives, libraries, museums, funds, data banks, public speeches, artistic and performing activities.

The definition of the monetary and quantitative components of the state information potential indicators is presented in Table 3.

**Table 3**  
Monetary and quantitative components  
of the state projects

Indicator for assessing the information potential of state projects	Monetary component	Quantitative component	Rating indicators
Presence of own hi-hume-technologies	Savings after the introduction of the systems	Number of technologies	
Development of e-government technologies	Savings after the introduction of the systems		E-government development index
Improved quality of information services provided by the government; reduction of administrative barriers; reduced administration costs; improved efficiency of government authorities and the quality of public and business services	Reduced customer service time (citizens and businesses); expanded range of public services; improved customer		Digital Opportunity Index (DOI); Networked Readiness Index (NRI); Information Society Index (ISI); Digital Access Index (DAI);

	satisfaction with services		Digital Divide Index (DDI); ICT Diffusion Index
Availability of information security technologies	Amount of returned finance	Number of detected and prevented cybercrimes	

As it has been mentioned, it is impossible to protect the country's information security without domestic information product. Such products are considered as indicators characterizing the information potential of the state. They include:

- presence of own high-hume-technologies. Traditionally, "high-hume" is referred to as an evolutionary leap in the development of information and communication technologies, which has a manipulative influence on management systems of the economy, politics and social spheres through vast arrays of processed information. The most important role in high-hume technologies is played by the information flow management: the dispersion of information, its previous processing, certain ways of its presentation.

- availability of information security technologies. The growing influence and significance of the information component of society, as well as psychological and technical possibilities for manipulating mass consciousness require a transition to a prognostic and proactive information support model in order to ensure effective protection against the technologies that have information and psychological impact. These technologies must meet the growing society demand for the necessary amount of reliable and useful information. In addition, it is necessary to address cybercrime. The Convention on Cybercrime is the basic international regulatory and legal document regulating public relations in combating cybercrime. Most European countries have adopted the laws providing for prosecuting providers for posting illegal content on their websites. However, some rules restrict providers' access to such information. Network providers cannot be prosecuted for the information transmitted by the networks, but they are obliged to take measures against the users and customers who transmit illegal information in the network.

- e-government technologies development. "E-government" consists of three areas of interaction or the so-called modules: between government and citizens (G2C - Government-to-Citizen), between government and business (G2B-Government-to-Business), between government authorities (G2G -Government-to-Government). These modules include numerous elements: free access of citizens to state information; transition to the paperless office model; the establishment of performance indicators for all public authorities and their regular monitoring by parliament and citizens; introduction of id cards in government agencies to identify government workers, etc. The indicator characterizing the e-government development is the E-Government Development Index (EGDI). It is compiled every two years by the UN Department of Economic and Social Affairs (UN DESA). The index consists of three sub-indices that characterize the state of information and computer technologies: infrastructure, human capital and online public services. Since 2012, Russia has been ranked 27 (0.7345 points) on the e-Government Development Index, demonstrating a significant progress compared to 2010 (59th position).

The implementation of e-government contributes to the improved quality of information services provided by the government; reduction of customer service time (citizens and businesses); reduction of administrative barriers; reduced administration costs; expanded range of public services; improved efficiency of government authorities and the quality of public and business services; higher customer satisfaction with services, etc. In terms of political outcomes, e-government technologies make the government activities open and transparent; enhance the participation of citizens and authorities in the information society; increase the level of citizen involvement in democratic processes; improve the effectiveness and efficiency of policies.

## 5. Discussion

Based on the conducted research, let us summarize the quantitative and qualitative indicators that determine the information potential at the level of the enterprise, region and state as a whole. As it has already been mentioned, the main disadvantage of existing methods for assessing information potential is the fact that they are focused on only one level while the information potential is not considered within the system: "enterprise-region-state": for example, on the information potential of an enterprise. Summarizing scientific developments, we should note that the indicators related to the number of computers, the Internet connection, etc. are used when



assessing information potential (Chernyshova, 2012). The scientific novelty of our research is the idea to summarize the existing assessment methods and develop an integrated approach to the definition of information potential, as well as to form a system of qualitative and quantitative indicators for its assessment. Qualitative indicators are a set of features that identify the main properties of information potential. They are determined through ranking of features in the system of qualitative classification scales for the information potential. In our research, we highlight the importance of domestic information-intensive products, since the information potential and information security of the country can be based only on such products and technologies.

The values of individual sub-indices are the important indicators of IT infrastructure development. Therefore, it is necessary to analyze them separately with the use of statistical methods or heuristic procedures and algorithms for determining development trends and critical areas.

Information development is impossible without adequate financial resources. Appropriate state policy and funding are required for the implementation of information projects. Therefore, financial and information potential should be regarded on a national scale. The choice of indicators characterizing financial potential is determined by the pluralism of approaches to understanding its essence. These approaches should be divided into the following groups:

- approaches related to the assessment of financial resources held by economic entities;
- approaches related to the assessment of income and incurred expenditure, taking into account performance indicators;
- approaches related to the assessment of other aspects of the economic system functioning, for example, depending on the level of credit resources, the ratio of public debt to GDP, etc.

Currently, the issue of using artificial intelligence to assess financial and informational potential is not properly addressed. This may be associated with the necessary high level of qualification of analysts, as well as the need to conduct interdisciplinary research (specialists must be competent in economics and finance, as well as in statistics, mathematics, databases, programming, etc.).

We believe that further scientific research will be associated with the use of data mining characterizing financial processes and phenomena in society. In the final stage of the assessment of the financial and information potential of the state, data visualization and the formation of conclusions and proposals are presented. Based on the thorough study of the identified imbalances and patterns in the development of financial and information potential, we have developed recommendations to improve the efficiency of the use of financial resources and the opportunities of the country.

Also, the proposed methodology makes it possible to build a regional index of information potential to compare the development of the infrastructure of administrative units. The data are collected for each region and the variables that are national characteristics are rejected.

The study of variable indicators by their correlation or functional dependence, as well as the index reliability and sensitivity testing will be possible if there is a statistical sample, that is, national data collected for a certain period of time, since similar data from other countries can't be used due to national specifics (SIBIS Indicator Handbook, 2003; Core ICT Indicators ITU, 2005; Schmidt & Cohen, 2014; Westerman et al., 2014; INCEAD Study: Global Innovation Index, 2016).

The development of the world economy is significantly affected by society informatization, which accelerates its growth and causes social transformations. Information potential is closely linked with the security of society and the intellectualization of the products and technologies being developed. In this context, personal information security becomes socially important. Information and knowledge have become key production factors, and information and communication technologies are an important tool for modern development. The growth of the knowledge economy is promoted by the growing demand for services that are provided through cellular and satellite communications, digital television and radio, telemedicine, the Internet, e-government, e-democracy, etc.

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## 6. Conclusion

Information is the most important economic resource, production factor and the decisive factor of competitiveness. Therefore, the information potential of the state must be specifically coordinated. Information management is becoming the most important entrepreneurial task. This is a significant factor contributing to the successful entrepreneurial activity and ensuring the security and competitiveness of the state as a whole.

Information potential is an integral part of the economic potential. Consequently, the method of its assessment is determined considering the overall goal of assessing the economic potential of the enterprise. The information potential assessment is carried out mainly in monetary terms of the economic efficiency of the enterprise (GDP, sales, net profit, etc.), or is presented in the form of the indicators characterizing its technical side (the number of information resources, technical means, types of communication, etc.)

Society informatization is complex and has several directions: the formation and use of information resources; creation, development and use of information systems, telecommunication networks (automated information systems, banks and databases, knowledge databases, etc.); information technologies for the collection, accumulation, dissemination and storage of information; access to the information provided by modern electronic computing and communication equipment, communication facilities. An important component of information potential is also the creation and use of information protection mechanisms (information security). According to the experience of industrialized countries, informatization contributes to ensuring national interests, improving the management of the economy, developing high-tech industries and technologies, increasing productivity, improving social and economic relations, enriching the spiritual life and further society democratization.

The improvement of information potential should be controlled. There is a need for a clear and integrated state policy aimed at managing information potential. It should be focused on ensuring comprehensive state information security through the development and implementation of domestic software and hardware products.

The foundations of the state policy for informatization and increasing information potential are: to improve the efficiency of production processes and management, as well as the formation of the information society and the sphere of information and communication technologies as an economy sector. These two concepts do not identify informatization with the sphere of information and communication technologies as a self-sufficient and highly dynamic economy sector. In the modern world, the management of information potential should be referred to as an area of state policy.

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