

**ЕКОНОМІКА ТА УПРАВЛІННЯ НАЦІОНАЛЬНИМ ГОСПОДАРСТВОМ**

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**Urgency of the research.** Grounding characteristic features of the present-day society it is impossible to argue dominating thought of the majority of scientists concerning its information character, in particular: it is accepted to define society as information one.

**Target setting.** Each day people have to face with the information world, that penetrates all spheres of the life of a modern person and tendencies for such deepening only grow with the emergence of new types of technologies that are designed to simplify our lives.

**Analysis of the recent researches and publications.** An important contribution to the knowledge of nature of the information society was made by such scientists as: V. G. Antonenko, Y. Bazhal, S. S. Grynkevych, I. A. Gruzina, O. V. Dzyav, S. A. Krystynavych, I. P. Malyk, Y. B. Nikolayev, O. V. Popadunets, O. S. Sukhariev, R. R. Tolstyakov, M. Y. Chumachenko and others.

**Defining not investigated before parts of general issue.** Notwithstanding existing considerable number of scientific works in sphere of research the information society, peculiarities of its development are left to be not investigated to the end by the scientists, manifestations of such society.

**Target setting.** Main aim of the article is defining the information society and identification of the main features of its development.

**Statement of the main material.** Within the article nature of information society is based, different scientific concepts concerning its interpretation are analyzed. Also main characteristic features of such society are defined to those are related: increase information role in society life, increasing the amounts of information, forming global information space, development of information and communication technologies (ICT), increasing the role of education, science and knowledge in society, increasing the part of information products and services in GDP.

**Conclusions.** Within this article peculiarities of forming and development of information society are investigated, its main characteristics are analyzed.

**Keywords:** information; information economy; information society; economic relations; economic subjects; information technologies.

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**Актуальність теми дослідження.** Сучасний етап функціонування суспільства характеризується активним розвитком інформаційної економіки, яка вже проникає у всі найважливіші сфери життєдіяльності людини.

**Постановка проблеми.** Прояв інформаційних технологій в економічних системах на сьогодні є найбільш відчутним, оскільки такі технології впливають на функціонування всіх без винятку економічних суб'єктів, змінюють найбільш важливі економічні процеси, що у підсумку трансформують її інші соціальні системи.

**Аналіз останніх досліджень і публікацій.** Дослідження сутності інформаційної економіки як однієї зі сфер розвитку інформаційного суспільства можна зустріти у роботах таких науковців: В. Г. Антоненко, Ю. Багал, С. С. Гринкевич, І. А. Грузіна, О. В. Дзяв, С. А. Кристиневич, І. П. Малик, Є. Б. Ніколаєв, О. В. Попадинець, О. С. Сухарєв, Р. Р. Толстяков, М. С. Чумаченко та ін.

**Виділення недосліджених частин загальної проблеми.** Враховуючи численні наукові напрацювання у сфері пізнання природи інформаційної економіки, не до кінця виявленими та вивченими залишаються основні характерні риси досліджуваного виду економіки, що обумовлює необхідність проведення додаткових досліджень.

**Постановка завдання.** Метою цієї наукової роботи є виявлення та опис основних характерних рис інформаційної економіки, з'ясування особливостей її прояву в межах розвитку сучасного впливу.

**Виклад основного матеріалу.** У статті обґрунтована сутність інформаційної економіки як складової частини розвитку сучасного суспільства. Зокрема, основна увага приділена визначенню та опису основних дескрипторів цього типу економіки. Розглянуто вплив інформаційних технологій на зміну сучасного стану світової економіки, з'ясовано особливості впливу таких технологій на процеси виробництва та збуту товарів і послуг.

**Висновки.** У статті з'ясовано сутність інформаційної економіки, визначені специфічні риси її функціонування у сучасному суспільстві та досліджено наслідки впливу інформаційних технологій на розвиток різних економічних систем.

**Ключові слова:** інформація; інформаційна економіка; інформаційне суспільство; економічні відносини; економічні суб'єкти; інформаційні технології.

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**Urgency of the research.** Current stage of the society functioning is characterized by rapid development of the information economy that has already penetrated in all most important spheres of human life and activity. Total penetration of the information technologies stipulates objective arise of interest to cognition the essence of new technologies and their influence on the activity of other objects of various nature.

**Target setting.** Manifestation of the information technologies in economic systems at the present days is the most noticeable, since such technologies influence on the functioning of all without exclusion economic subjects, change the essence of running the most important economic processes, that as a result flavors to gradual transformation of other social systems. This uniqueness influences the information economy and other spheres of modern society, increases interest and makes urgent the necessity of the scientific researches performing in this sphere and cognition of the peculiarities of the researched type of economy development.

In considerable number of scientific works sometimes categories “information society” and “information technology” are identified and treated as synonymous concepts. This approach deserves attention, since it is impossible to study the information economy notwithstanding the essence and peculiarities of the society origin and development, within which economic relations function. However, by its nature, economy is manifestation of only the definite sphere of relations in society, and that is why the information society is the most global category, that comprises economic component that develops under the action of definite specific characters of such society functioning.

**Analysis of the recent researches and publications.** Issues of cognition the nature of the information society and its main features of functioning are researched in scientific works of many scientists, to those the following ones should be related: D. Bell, Z. Bzezinsky, R. Breitenstein, M. Kastels, S. Lesh, J. Masuda, K. May, G. Neisbitt, F. Rodriguez, T. Rozak, T. Stoneyer, O. Toffler, A. Turen, F. Webster, F. Ferrarotti and others. This topic is also left in the focus of attention of the domestic researches, among which the most important development have O. Alymov, V. Andruschenko, I. Boychenko, O. Golubutsky, B. Danylyshyn, L. Gubesrky, V. Didenko, D. Dyuzhev, M. Zgurovsky, V. Kushertsev, V. Mykytenko, I. Sergienko, V. Skalatsky, O. Shevchuk, A. Chukhno and others.

Investigation of the information economy essence as one of the spheres of the information society development can be met in works of such scholars: V. G. Antonenko, Iu. Bazhal, S. S. Grynkevych, I. A. Gruzina, O. V. Dziad, S. A. Krystynevych, I. P. Malyk, Ie. B. Nikolaiev, O. V. Popadynets, O. S. Sukhariev, R. R. Tolstiaikov, M. Ie. Chumachenko and others.

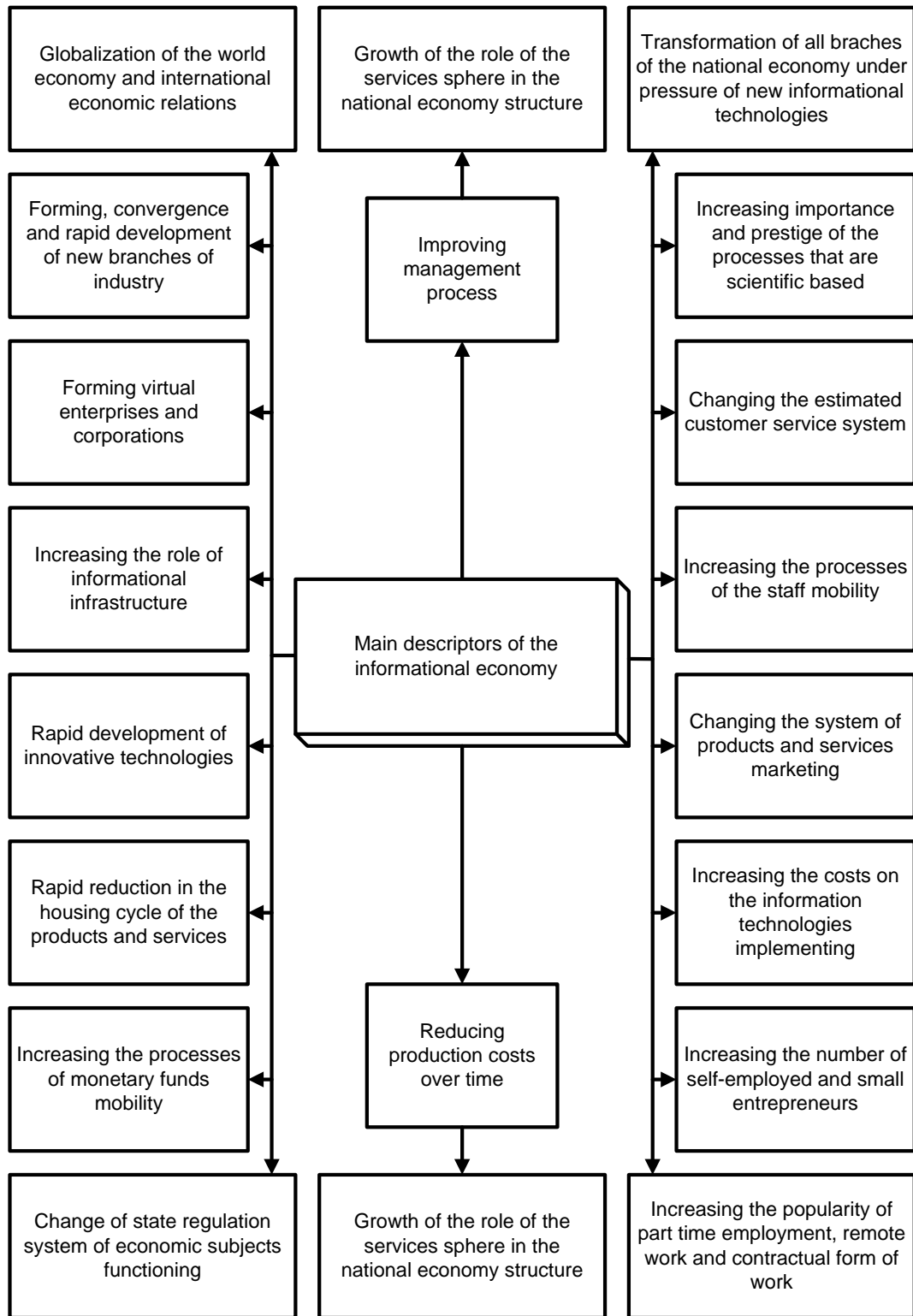
**Defining not researched parts of the general problem.** Taking into consideration numerous scientific developments in sphere of cognition the nature of the information economy, main characteristic features of the defined type of economy are left to be nor researched and found out to the end, that stipulates the necessity of conducting additional researches with the purpose of identification and description of basic descriptors of its development.

**Target setting.** So, the aim of this scientific work is identification and description of the main characteristic features of the information economy, clarifying peculiarities of its manifestation within development of modern influence.

**Statement of main material.** Within this article, considering the essence of already created scientific concepts of interpretation the category: “information economy”, this type of economy is considered as a type of economic system, within which information plays an important role in the development of the main spheres and branches of national production, is an indivisible element of the production processes implementation, distribution, exchange and consuming, further development of such system is directly connected with implementing new information technologies into the activity of various economic subjects.

It should be noted that definition “information economy” at the present moment is used for definition of the economic system, where politics, society and culture depend on creation, storing and feasibility of information both in national and the world scales for using cognitive-information methods of identification the knowledge movement (means of its receiving; mechanisms of selecting, spreading and transformation, as well accumulation, translation and using in all spheres of national economy).

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**Scheme 1. Main descriptors of the information economy**

Source: compiled by the authors

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Let's define main descriptors of the information economy, in other words, key characteristic features that are inherent to such type of economic relations. In general, descriptors are descriptive characteristics. The definition itself comes from the Latin word «*describo*» – describe [2, p. 52] (Scheme 1).

Let's consider them in details.

*Globalization of the world economy and international economic relations* – actually, the information economy creates prerequisites for strengthening globalization tendencies of the world economy development. Information technologies increase rapidness of various economic resources transfer, level of cross-border capital movement increases, that creates prerequisites for increasing mobility of the enterprises, organizations. Availability of the globalized Internet network allows to coordinate activity of many structural departments of various companies that can be located in different countries, on different continents. Information economy stimulates creation of big transnational corporations, ease the structure of the efficient management systems within such enterprises that only strengthen globalization tendencies to their development and flavors to increasing the number of such enterprises.

Special role is played by the information technologies within the processes of capital flow between the countries, search of the most profitable and secure ways of its contribution and receiving maximal profit by maximally allowable risk. Availability of such possibilities gives the possibility to use free financial resources more efficiently within not only separate group, but in fact in the whole world space of the economic relations.

*Growth of the role of the services sphere in the national economy structure*– information economy is connected with the active development of the services sphere and its gradual prevailing over the sphere of the goods production. As a result, gradual change of the national economy structure in direction of increasing the role of non-material production, takes place. Actually, as its was already stated, increasing the services sphere if a peculiar characteristic of the information society, and, without doubt, influences on the economic sphere of its functioning.

*Transformation of all braches of the national economy under pressure of new informational technologies* – within the information economy all branches and spheres of the national economy start developing under the pressure of new information technologies that penetrate in all spheres of the economic life of society, including activity of the individual economic entities. Within this type of economy transformation of the material and technical base of production takes place, that is improved, becomes more productive and less costly from position of new goods producing. The most part of the production costs is given for conducting, first of all, scientific researches, new technologies development concerning the goods production.

*Forming, convergence and rapid development of new branches of industry* – besides positive influence on already created traditional branches and spheres of the national economy, within the space of the information economy new sectors of economy start originating. Economic bases of the information society are branches of the information industry that have influence on all branches of economy and competitiveness of the countries on the world arena [1, p. 124]. Development of these branches only increases active functioning of various enterprises within national economy and flavors to the active process of innovations elaboration and implementation into the production sphere.

Besides arising and rapid development of new branches of economy, quite close interrelation between different spheres of the national economy take place, that flavors to arising complicated innovations, implementation of which lays strong foundation of future development of the enterprises and countries in general. O. V. Dziad notes, that on the macro level new branch of economy appears – information industry that is formed as a result of combining the branches of computing technics (computers production, software development, providing services on their servicing), communication (the Internet, telephone, cable television, satellite communication, radio) and information content (librarian, archive and publishing, information services, entertainment industry, etc.) [3, p. 130].

*Forming virtual enterprises and corporations* – information economy through implementing innovative technologies into the system of communication flavors to creating strong base for creating virtual enterprises that provide their services exclusively to their clients and mostly acquire minimal

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amount of material assets. Development of this new sector of economy allows to activate activity of small enterprises and decrease unemployment level. Functioning of the defined subjects takes place exclusively by communication means and the Internet. Interaction with the clients is performed through special on-line platforms, official sites and special cabinets for offering relevant services. These enterprises are created and function quite actively at the present moment through the Internet and etc.

*Increasing the role of informational infrastructure* – development of the information society demands constant development of the correspondent infrastructure, that allows to implement, support and distribute information technologies within the country and in the whole world. This process requires creating prerequisites for fundamental modernization of already created information infrastructure considering modern scientific achievements. Information infrastructure of the economy is created by the enterprises and organizations, centers of information processing and analysis, channels of information exchange, communications and lines of communication, means of information interaction. One of the key technical characteristics of the information economy is the Internet network, that became the platform for new means of business conducting, providing by the government state services and providing possibilities of continuous studying [4, p. 26].

*Rapid development of innovative technologies* – information economy favors to creating prerequisites for innovative development of society that is manifested not only in creating leading information technologies, but stimulates for rapid development other components of front changes, that are indirectly connected with information and mechanisms of its processing. Actually, information technologies favor to activation of the innovative process within separate enterprises, forming financial base of new scientific researches implementing in various spheres of the national economy. These technologies as well favor to convergence of different scientific institutions and their scientific results, form the base of innovations diffusion, for their quicker penetration not only into non-material sphere of production, but as well into the sphere of goods production.

*Increasing importance and prestige of the processes that are scientific based* – taking into consideration all the above mentioned, information economy demands considerable number of highly educated people that can do not only routine work, but have skills to produce new ideas and the ability to realize them, Considering this important meaning within the system of such economy specialists that can think in non standard way, have abilities to think over new qualitative achievements, implementing of which has potential to big-scaled actions and changes, become more popular.

*Increasing the number of involved in sphere of creating and development of the information technologies* – information economy favors to active development of the information branches of the national economy, increasing their role in GPD forming of the countries that go by way of creating this type of economy. Accordingly, the defined situation demands involving on the continuous base more and more new employees to this sphere. Thus, information branches create change on the labor market, in many cases – they structurally transform such market, filling it with new vacancies, professions and requirements to the employees. Nowadays, there are numerous examples of creating within the information economy the entire system of new professions and titles. This situation stipulates gradual change as well of the system of the employees training, in particular it can be felt in the developed countries, where the higher education is transformed by such rapid tempo as the information industry in general, satisfying demand for new professions and increasing qualification of the workers.

*Increasing the number of self-employed and small entrepreneurs* – information technologies favor to the development of small business, since they don't require essential material main funds, separate workshops for goods producing. To organize small enterprise in sphere of the information technologies there is no need in significant investment resources, that open the way for big number of small entrepreneurs with limited possibilities. This situation has deep impact on change on the structure of national economy and favors the development of small entrepreneurship in the country.

*Increasing the popularity of part time employment, remote work and contractual form of work* – information technologies allowed to actively develop part employment of the employees, increase the level of using remote work, by which the employee stays at home and can work at that time when it is more convenient for him. This situation brings considerable number of positive moments both for the



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employer, who doesn't need to create the working place and for the employee, what is only need is connection to the global network and availability connection system with the client. This tendency of the information economy considerably eased relations between subordinates and leadership, availability of the personal e-mail, pages in social networks flavor to establishing closer cooperation between all links of management.

*Increasing the processes of the staff mobility* – availability of possibilities to work at any convenient time remotely allowed to increase staff mobility. Absence of physical binding to the working place allows the employees to conduct more convenient way of life, increase own level of professionalism, use information technologies. As well, more transparent system of employment flavors to creating the conditions for work change, that can be searched on the Internet and look through the vacancies in various countries. Staff mobility also lays in that fact that there is a possibility of quick adaptation to new conditions of work that is due to its flexibility and ability to constant changes. That especially concerns the directors, top-managers and managers of different levels, that at the present moment are quite free in their choice of the working place.

*Change of state regulation system of economic subjects functioning* – within the information economy change of the state regulating and controlling the activity of actually all subjects of economic activity takes place. Modern information technologies allow to receive actual data about the state of the financial establishments and predict further development of various sectors of the national economy. Mentioned technologies give the possibility to form complicated mechanisms of processing the data of different nature and receive information for making managerial decisions.

*Improving the management process* – management process within separate subjects of economic activity as well constantly changes under the pressure of implementing new information technologies. These mechanisms allow to receive information quickly about the current state of the enterprise, ease system of communication, approving, agreeing different reports, data and in general the managerial information.

Within the enterprises information technologies provide possibilities of implementing analysis of considerable amounts of data, conduct automatic systematization and processing of them and issue final generalized data. That, in first turn, flavors to accelerated making managerial decisions that are based on such information, and react quicker to dangers of inner and outer environment concerning the economic entities.

*Changing the system of products and services marketing* – in marketing sphere information technologies actually made revolution and increased channels number of products promotion, starting from their advertising and ending with their sale on online-platforms. Nowadays, each enterprise has got its own site that allows within the Internet system to all potential partners get acquainted with the goods assortment, their specification, assortment, peculiarities of production and sale. This channel of awareness of potential clients, buyers, competitors gives the possibility to distribute information about the enterprise for considerable audience.

Also, for the information economy already traditional nowadays become service of ordering and delivery the goods home, purchase the products, clothes, electronic gadgets and rest of the goods through internet shop. These purchases can be made through the shops all round the world, that considerably spreads possibilities of the buyers concerning satisfying own needs. That, in its turn, requires from the marketers paradigm change of advertising and promoting different goods and services, awareness of the information technologies potential concerning sale.

*Increasing the processes of monetary funds mobility* – within the information economy, for which one of the main characteristic feature is global character, a peculiarity is easing the processes of the capital movement among the countries, separate enterprises. Within such economy profit can be forms in one countries and legalized in the other countries, where it can be used again for quite different purposes. In global economic environment such processes become quite wide spread.

Information technologies as well ease process of money transfer among individuals in the whole world. At the present moment, these transfers in majority of cases can be made in the branch of any bank that provides these services, as well in thousands of sub departments in the whole world.

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*Changing the estimated customer service system* – the information economy that is built on using information technologies could not influence on the character of cash management servicing of the clients through banking and other financial institutions. Today, financial intermediaries actively use all achievements of these technologies to increase the quality of provided services to their clients, easing for them procedure of settlements with their partners, clients, state authorities.

Information technologies make possible implementing on-line payments that are already accepted as an obligatory service, since it is characterized by a considerable number of advantages. They provide conducting on-line payments, give access to constant monitoring of own, credit monetary funds, provide possibility to receive settlement documents quite quickly. Availability of plastic cards, cash point machines, post-terminals only make the access quicker and simply settlements between different economic subjects, ease this process.

*Rapid reduction in the housing cycle of the products and services* – within the information economy, when competitiveness between the enterprises becomes global, that is due to rapid development of the information technologies, significant number of goods and services quickly becomes morally mature. Especially, in the sphere of information technologies their active innovative improvement and renewal actively takes place, that, as a result, influence on all spheres of the national economy. These processes require constant modernization of the modern equipment, improving the goods and services themselves, that, as a result, demand renewal of the goods assortment and decreases the housing cycle of the products, All the above mentioned demand forming and implementing new mechanisms of the goods production, constant modernization of the production process to provide appropriate level of the enterprises' competitiveness.

*Reducing production costs over time* – in sphere of services, where the most costs are the costs for labor and initial equipment, technologies change and their constant improvement favors to forming prerequisites of decreasing prime costs of these services. Significant level of market competitiveness only strengthen the process of continuous struggle for clients and makes the producers of goods to search new means of prime cost minimization by following appropriate level of quality.

Information technologies, as it is shown by the brand of the recent decades of the active information technologies development, also influences on number of involved to the production process employees. In many branches of the national economy these technologies lead to shortening the number of employees that is due to change of their work by work of the modern technologies. Active use of robots, automatic mechanisms lead to decreasing the number of employees and, accordingly, makes possible decreasing the costs for staff and low prime cost of the produced goods. Significant potential to using information technologies and their positive influence on lowering the production costs and product sale make their implementation very important from the point of view of owners and top-managers.

*Increasing the costs on the information technologies implementing* – in conditions of the information economy, when the costs for employees labor are decreased, increase of financing new information technologies and their adaptation to the need of the definite enterprises take place. Costs as well grow not only for buying and installation on new machinery but for its further servicing and improving. It is this fact that opens for the producers of such machinery additional means of receiving profit on the constant base. Rest of the clients should increase own costs for constant modernization of the enterprises with the purpose to stay competitive in modern economic conditions.

**Conclusions.** Within the article it was suggested to consider the information economy as a type of economic system, within which information plays key role in the development of the main spheres and branches of the national production, is an indivisible element of production processes implementation, distribution, exchange and consuming. Further development of this system is directly connected with creating and implementing new information technologies into the activity of various economic subjects. Also, within the article in context of cognition peculiarities of the information economy functioning its main descriptors are identified, their nature is identified, peculiarities of development in modern society are described.

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1. Hrytsenko, O. (2004). Problemy informacii noi intehratsii ta stanovlennia informatsiino ho suspilstva [Problems of information integration and development of information society]. *Visnyk Lvivskoho universytetu. Seriya zhurnalistyky – Bulletin of Lviv University. Series journalism*, 25, 123-129 [in Ukrainian].
2. Hrosul, V. A., Zhyliakova, O. V. (2015). Otsinka turbulentnosti zovnishno ho seredovyscha v systemi antykrizovoho upravlinnia pidpriemstvom [Evaluation of the turbulent environment in the system of crisis management now]. *Ekonomichnyi chasopys – Economic Journal*, 3-4(2), 51-54 [in Ukrainian].
3. Dziad, O. V. (2014). Fenomen informatsi noi ekonomiky: parametry, dynamika, perspektyvy [The phenomenon of the information economy, parameters, dynamics, prospects]. *Visnyk ONU imeni I.I. Mechnykova – Bulletin ONU named after I.I. Mechnikov*, 19(2/1), 129-133 [in Ukrainian].
4. Malyk, I. P. (2013). Tendentsii rozvytku informatsi noi ekonomiky v Ukraini [Trends in the information economy in Ukraine]. *Visnyk Shkhidnoevropeiskoho universytetu ekonomiky i menedzhmentu – Bulletin of the Eastern University of Economics and Management*, 14, 25-34 [in Ukrainian].

**Література**

1. Гриценко, О. Проблеми інформаційної інтеграції та становлення інформаційного суспільства / О. Гриценко // Вісник Львівського університету. Серія журналістики. – 2004. – Вип. 25. – С. 123-129.
2. Гросул, В. А. Оцінка турбулентності зовнішнього середовища в системі антикризового управління підприємством / В. А. Гросул, О. В. Жилиякова // Економічний часопис. – 2015. – № 3-4 (2). – С. 51-54.
3. Дзяд, О. В. Феномен інформаційної економіки: параметри, динаміка, перспективи / О. В. Дзяд // Вісник ОНУ імені І. І. Мечникова. – 2014. – Т. 19, вип. 2/1. – С. 129-133.
4. Малик, І. П. Тенденції розвитку інформаційної економіки в Україні / І. П. Малик // Вісник Східноєвропейського університету економіки і менеджменту. – 2013. – Вип. 1 (14). – С. 25-34.

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