

INTELLECTUAL CAPITAL DEVELOPMENT WITHIN THE CONDITIONS OF THE INFORMATION SOCIETY

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Abstract. In the era of rapid development of the information society, there is a problem of accumulation and rational use of intellectual capital, as well as the need to ensure its development. Now it is impossible to carry out the effective activity of enterprises without technologies, know-how, inventions, knowledge and experience of workers. Since world globalization and rapid transformation of the domestic economy led to some kind of economic and financial instability, which leads to an increase in interest in the research and use of information, it becomes necessary to study the possibilities of providing intellectual capital development in entrepreneurship and in the country. It should also be noted that sufficient funding for the development of intellectual potential leads to increased competitiveness of the country as a whole. Therefore, intellectual capital in a society with information as the main source holds key positions and is at the centre of a number of issues related to the development of entrepreneurship in the country, the development of the information society, the knowledge society, and the digital economy. Taking into account the cultural and value aspect and the explicit and implicit problems of multi-agent interaction in the information society, we believe that the approaches to the definition of the “information society” should not be antagonistic to each other, but symbiotic, and integrate the workings of each area of research of scientists, taking into account rapid development, globalization and informational synergistic effects that arise in recent years, it can be argued that the concept will be repeatedly transformed. It is investigated that, in the context of the information society, the concept of “intellectual capital” appears. We determine that intellectual capital is an aggregate of knowledge, experience, skills, creativity, abilities, relationships, accumulated in the process of intellectual activity, that have economic value and are used in the process of production and exchange for the purpose of obtaining income. The conducted research allows generalizing the conclusion that exactly the development of information and communication technologies has led to the emergence of an information society, which was an impetus for the development of e-economy, which precisely determined the emergence of e-commerce as its inherent part. It is proven that financing for the development of intellectual capital is required for many reasons; however, one of the keys is to raise the level of competitiveness not only of enterprises but of the state as a whole. Thus, the intellectual potential of citizens is aimed at the economic, technical, and cultural development of enterprises and their own state. Therefore, the support and development of the information society and its main good, namely, information and knowledge, should be actively implemented in enterprises for further development of entrepreneurship, the economy of the country and the state. That is why the research of models of financial provision of intellectual capital, which was carried out in the article (investment, crowdfunding, innovative), are defined as perspective directions of development of science and practice.

Key words: information society, knowledge society, e-economy, network economy, intellectual capital.

JEL Classification: J24, F21, L86, F20, A13

1. Introduction

In the era of rapid development of the information society, there is a problem of accumulation and rational use of intellectual capital, as well as the need to ensure its development. Now it is impossible to carry out the effective activity of enterprises without technologies, know-how, inventions, knowledge and experience of workers. Since world globalization and the rapid

transformation of the domestic economy led to some kind of economic and financial instability, which determines an increase in interest in the research and use of information, it becomes necessary to study the possibilities of providing intellectual capital development in entrepreneurship and in the country. It should also be noted that sufficient funding for the development of intellectual potential leads to increased

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competitiveness of the country as a whole. Therefore, intellectual capital in a society with information as the main source holds key positions and is at the centre of a number of issues related to the development of entrepreneurship in the country, the development of the information society, the knowledge society, and the digital economy (Radionova, 2008).

The main purpose of the article is to analyse methodological foundations of formation of “information society”, “information economy”, and to identify prospects for ensuring the development of intellectual capital as a key factor of information society of the country.

2. The methodology of research

Among the scholars who considered the issues of informatisation of society and economy, one can distinguish scientific achievements of N. V. Apatova (Apatova, 2013), L. S. Vynaryk, A. N. Shchedryn, N. F. Vasyleva (Vynaryk, Shchedryn, Vasyleva, 2007), A. I. Rakitov (Rakitov, 1991), A. Toffler (Toffler, 1996), D. Bell (Bell, 2004), I. H. Khanin (Khanin, 2012), Y. Masuda (Masuda, 1983), J. Baudrillard (Baudrillard, 2013) and others, each of them investigated individual directions of origin, evolution, and development of informatisation and information society, transformational properties, and prospects for the future.

Issues of intellectual capital, its role in enterprises, economic space, and development of the country as a whole were dealt with by domestic and foreign scientists such as A. Brooking (Brooking, 2001), Yu. Bukhanova, S. Klymko (Klymko, 2006), L. Edvinsson, M. Malone (Edvinsson, Malone, 1999), I. Radionova, E. Skrzypek, S. Ushakova (Ushakova, 2015). Scientific papers of such scholars as I. Botkin, O. Drahan, T. Maiorova, S. Illiashenko are aimed at solving the issue of financing intellectual capital.

At the same time, the new nature of economic growth, the decisive role in it of non-material factors, first of all, the need to provide transformational processes in the information society, require a more detailed study and analysis, which led to the writing of the article.

The modern information revolution has become possible due to the coincidence of many factors: 1) the emergence of digital means of processing large volumes of electronic information resources, the rapid development of electronics; 2) the development of the space industry and the establishment of satellite communication technologies; 3) the development of information and network technologies and the emergence of the Internet (Vynaryk, 2007). In accordance with the scientific doctrine of A. I. Rakitov, the essence of the information revolution is to “change the tool base, the way of transferring and storing information, as well as the amount of information that is accessible to the active part of the population” (Rakitov, 1991).

According to the concept of information revolutions by A. Toffler (Toffler, 1996, p. 275), D. Bell (Bell, 1998, p. 195), “informatisation of society is not a scientific and technical fashion ...”, “...the process of informatisation today acts as a global”, it can “...be qualified as a new socio-technical revolution.” I. Khanin believes that “the basis of ... civilizational changes is the sixth information revolution, the result of which is the formation of a new civilization in the world – an information society” (Khanin, 2012).

A society, in which the production and use of information and knowledge are an important activity, is undoubtedly transformed by obtaining new properties and attributes, the main of which are the following:

- 1) formation of a single information and communication space of the country as a part of the world information space;
- 2) formation and further dominance in various areas of perspective information and digital technologies;
- 3) creation and development of a market for information and knowledge bases at a higher level than the market for natural resources, labour and land, and the constant emergence of new opportunities to meet the needs of society through information products and services;
- 4) the growth of the role of information and communication infrastructure in the system of social production;
- 5) raising the level of education, scientific and technical and cultural development by expanding the possibilities of information exchange systems;
- 6) high level of education due to the expansion of the possibilities of information exchange systems at the international, national, and regional levels and, accordingly, increased role of qualification, professionalism, and ability to creativity as the most important characteristics;
- 7) high importance of information security of the person, society, and state, creation of new security systems;
- 8) transformation of the traditional system of ensuring the rights of citizens and social institutions to freely obtain, disseminate, and use information to modern standards (Chaffey, 2011).

The methodological positions regarding the term “information society” are somewhat divergent. In the scientific literature on economics, management, and information management, there are two opposing approaches to its interpretation. According to the first one, which is followed, in particular, by Y. Masuda (Masuda, p. 9, 479-494), D. Bell (Bell D., 2004), M. Castells (Castells, 2011), J. Baudrillard (Baudrillard, 2013), S. N. Kolesnikov, N. N. Ermoshenko (Ermoshenko, 1991), the information society is considered an economic concept that has important technological characteristics. Logical is the approach of D. Bell (Baudrillard, 2013), who expresses the view that the basis of the information society is a new intellectual technology, which is used in making managerial decisions.

The opposite view is respected by M. Poster (Poster, 1997), R. Robertson (Robertson, 1992),

A. Rakitov (Rakitov, 1991), Z. Brzezinski, A. Toffler (Toffler, 1996); they consider the social component of this term, focusing on communication as the main catalyst and an impetus for transformation in society.

The main distinguishing features of the information society include: 1) information economy; 2) a high level of information needs of all members of society and the actual satisfaction of these needs for the bulk of the population; 3) high information culture; 4) the free access of every member of the society to information limited only by the information security of the individual, community groups, and the whole society (Diatlov, 2015).

Taking into account the cultural and value aspect and the explicit and implicit problems of multi-agent interaction in the information society, we believe that the approaches to the definition of the “information society” should not be antagonistic to each other, but symbiotic, and integrate the workings of each area of research, taking into account rapid development, globalization and informational synergistic effects that arise in recent years, it can be argued that the concept will be repeatedly transformed.

The tasks to be solved in the transition to the information society are presented in Figure 1.

Let us outline the main problems that catalyse before the society in the framework of a definite research direction, which are objective: firstly, behavioural (acceptance and adaptation to a new social organization, rethinking the role and significance of knowledge and information, their value for the progressive development of society; the influence of intellectual technologies and telecommunications on the behaviour of members of society) (Bell, p. 150-160, 500-508); secondly, institutional (the problem of interaction between historically established political institutions and all global economic agents; the problem of the relationship between the ruling elite and the masses in the information space; the problem of cultural diversity and pluralism; the problem of the choice of development course of science and education) (Laudon, Laudon, 2012); thirdly, cultural and ecological (the change of the essence of social institutions (from family to school); the problem of the growth of volumes of information flows; the impact of total globalization on the formation of a new system of values of super industrial society; the problem of the formation of a new mental reality

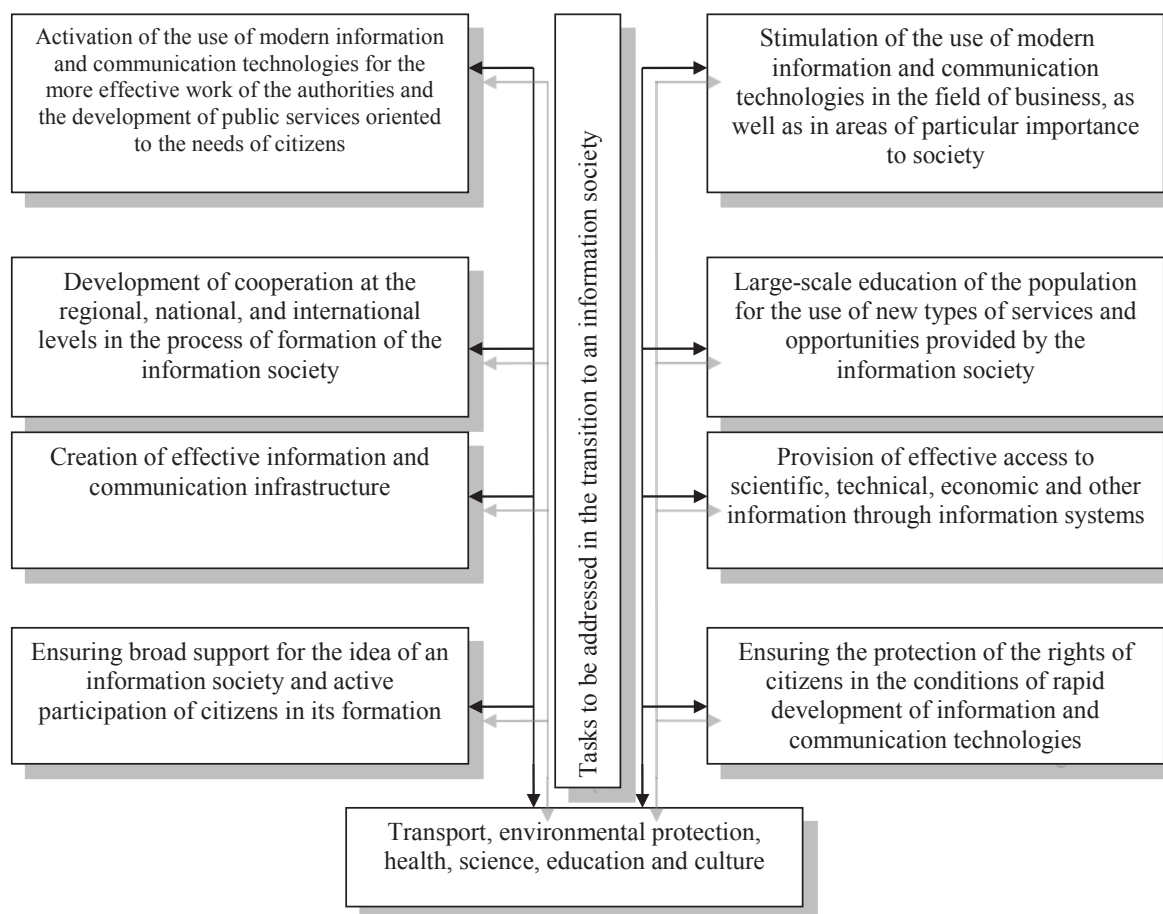


Figure 1. Tasks to be solved in the transition to an information society

Source: developed by the author based on Castells, 1985; Diatlov, 2012; Martynyuk, 2015

based on fragments received from demassified mass media; formation of ecological culture) (Castells, 1997; Martynyuk, 2015).

Consequently, an information society characterized by permeability in all spheres of human life has a certain economic, legal, and technological foundation, which is based on the active globalization of economic, political, and cultural processes. As we see, advances in information technology and communication change our way of life: how we work and do business; how do we raise children; studying and conducting research; how we have fun. The information society not only affects the interaction of people but also requires traditional organizational structures to be more flexible, more active, and more decentralized.

P. Drucker argued that there was a transition from an economy based on material wealth to a knowledge-based one (Drucker, 2003). M. Porat highlights the primary sector (information products and services directly used in the production, distribution or processing of information) and the secondary sector (information services produced for domestic consumption by governmental and non-governmental organizations) of the information economy (Porat, 1999).

For D. Bell, the number of employees providing services and information is an indicator of the informational nature of society. Post-industrial society is based on services. Post-industrial society is one in which most workers or all workers are not involved in the production of material values (Bell, 1998).

However, it is in the context of the information society where the notion of "intellectual capital" appears. According to the definition of L. Edvinsson and M. Malone, intellectual capital is the difference between market value and the book value of an organization, that is, the amount of hidden assets that are not included in the company's balance sheet. Thus, intellectual capital is non-financial capital, reflecting the hidden gap between market and book value (Edvinsson, Malone, 1999). The interpretation of this concept is still quite controversial; however, we understand it as the knowledge, skills, and production experience of specific people and intangible assets that are productively used to maximize profits and other economic and technical results. It consists of:

- 1) human capital (factors that allow better understanding what individuals are, namely: professional skills, leadership, interpersonal skills, and motivation);
- 2) organizational capital (factors that are closely related to organizational structure and processes such as: corporate culture, communication, organization, innovation in products and technologies, and transfer of skills and information systems);
- 3) consumer capital (created by the company's external relations with shareholders, investors, partners, customers, and suppliers).

3. Results and discussion

As noted by L. S. Vynaryk, A. N. Shchedryn, N. F. Vasyleva, the main distinguishing features of the information society are: "information economy"; "... a high level of information needs ... of society"; "free access of everyone to electronic information resources"; "development of the economic space in which business entities operate"; "the appearance of ... electronic information"; "the need to take into account the time factor" (Vynaryk, Shchedryn, Vasyleva, 2007).

Thus, the evolutionary processes of the formation of the information society, naturally affect the formation of the electronic economy (Chaffey, 2011; Kalakota, 2010; Laudon, 2012). Examples and trends of virtualization of the economy are shown in Figure 2.

As N. O. Chuchko, N. V. Apatova, L. S. Vynaryk, A. N. Shchedryn, N. F. Vasyleva note, EC influences the e-economy: 1) the transition from the unified consumption to the individual is carried out; 2) e-commerce can be carried out both at the national and international level but it is virtually impossible to divide these levels and to determine the geographical location of the seller; 3) e-commerce allows to balance the state in the international division of labour (Apatova, 2013); 4) investment and trade barriers disappear; global market strategy is developing; 5) the competition between individual countries and interstate economic centres sharply intensifies, and victory in acute competition requires continuous innovation to support economic and information leadership in global markets (Vynaryk, Shchedryn, 2007).

In a broad sense, the e-economy is an economy based on the widespread and intensive use of information, knowledge, and information technology; in the narrow sense – a network economy, that is, an economy based on network technologies and models of business-to-business (Business 2 Business) and business-to-consumer (Business 2 Consumer) (Matvieiev, 2012).

I.A. Matvieiev interprets e-economy as "... the form of economic activity of the information society, which characterizes the totality of relations in the system of digital production of goods and services, their distribution, exchange, and consumption" (Matvieiev, 2012). For example, V.A. Vysotska uses the term "virtual economy" and interprets it as: "... an economy based on interactive business and on the main law of man-saving time" (Vysotska, 2008); the same term in the broader sense defines the virtual economy as: "a special economic space, in which electronic commerce, electronic business is carried out; it is an economy based on the use of interactive capabilities" (Vysotska, 2008). K. V. Chekina determines the notion of "network economy", defining it as "... commercial (economic activity) carried out by means of electronic networks" (Chekina, 2015). This idea may be supplemented by the point of view of S. A. Diatlov, who defined the term

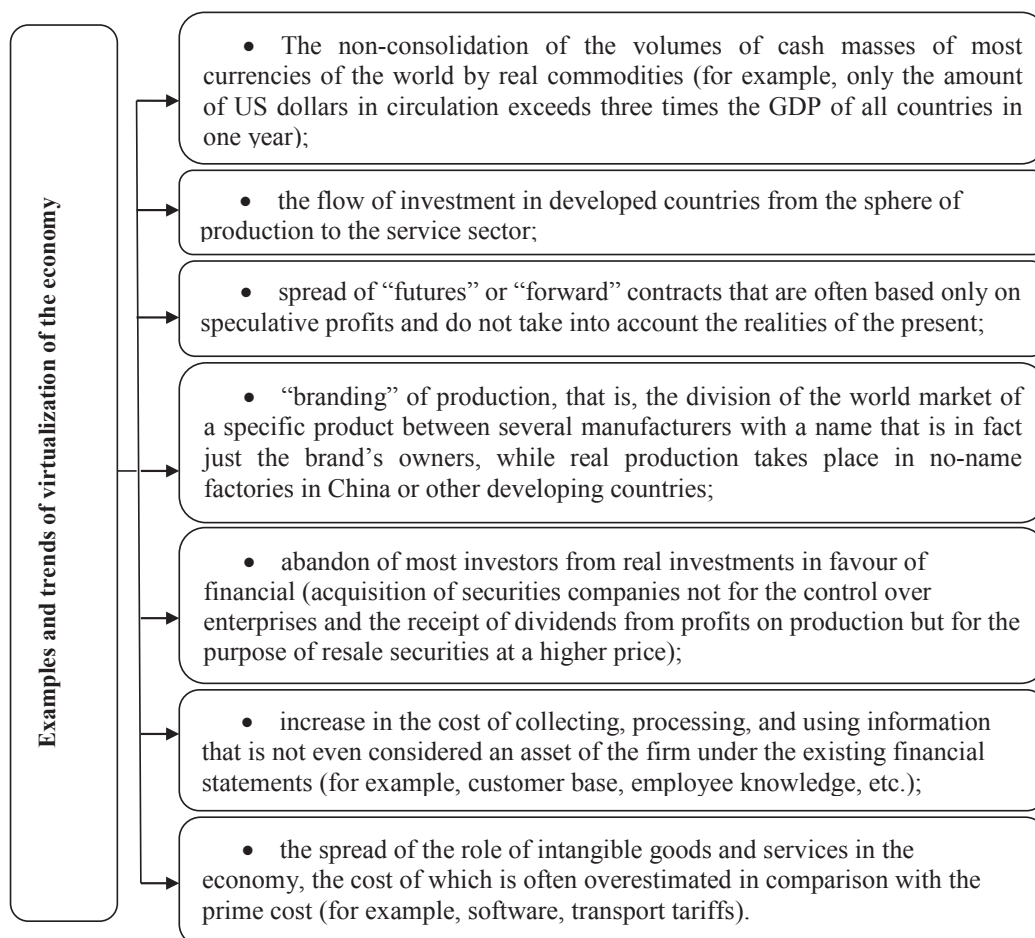


Figure 2. Examples and trends of virtualization of the economy

Source: developed by the author based on Goroviy, 2011; Martynyuk, 2015

“information and network economy” as “... a global network of complex and organized multilevel structure of interrelations between economic agents through the Internet and other telecommunication facilities” (Diatlov, 2015).

He also applies the concept of “electronic economic activity”, considering it only from the point of view of trade, that is, “... the sale of goods and services in electronic form (software, information, etc.) with the use of modern information technologies”; this point of view is very controversial because it does not take into account other areas of e-business, such as outsourcing, leasing, factoring, recruiting, insurance, etc. (Diatlov, 2015).

The existence of various interpretations allows covering all the diversity of manifestations of e-economy and considering it as a form of economic activity, the structure of interrelations, business environment, and process. Thus, one can agree with the scholars who say: “... technological process and innovation are long-term driving forces of economic growth” (Diatlov, 2015). Summarizing the foregoing, let us highlight the place of e-commerce among the segmented levels of e-economy (Figure 3).

The knowledge-based economy is a conceptually new phenomenon that leads to a radical change in the fundamental principles of the economy and society as a whole, the formation of a new paradigm of socio-economic development and scientific knowledge. According to expert estimates, from the middle of the XX century, the amount of knowledge available to mankind doubles every 20 years, according to the World Bank, physical capital in the modern economy forms 16% of the total wealth of each country, natural – 20, and human capital – 70%. In countries such as Japan and Germany, the share of human capital is up to 80% of the national wealth (Karpus, 2011).

The formation of knowledge-based economies by states is reflected in a number of theories that have emerged in modern science. These theories include the theory of the economic nature of knowledge, the laws of management based on the use of knowledge and the impact of knowledge on economic factors; economic tools for measuring knowledge; the priority of the role of a person in the new economic development, which in their totality require generalization and systematization.

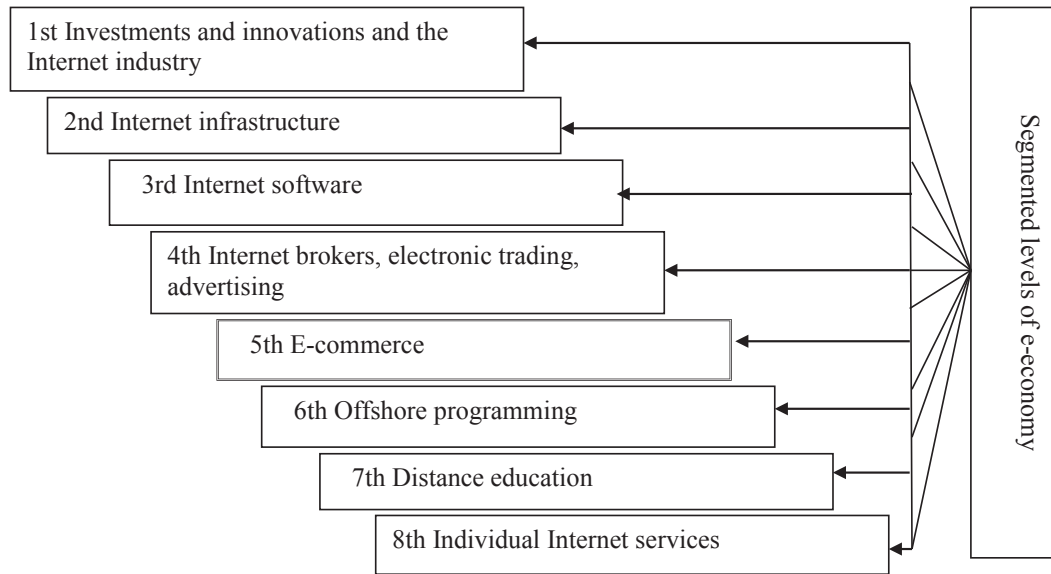


Figure 3. Segmented levels of e-economy

Source: developed by the author based on Diatlov, 2015; Martynyuk, 2015

The development of the economy and modern entrepreneurship, in conditions of global competition, is almost impossible without the active orientation of production structures on innovation and intellectual activity. In this regard, the question arises about the definition of intellectual capital, the analysis of methods for its evaluation, since it is the efficient use of intellectual capital that allows significantly improving the quality of products, information, new managerial technologies, and industrial innovations, which is an integral part of the economic policy of the modern enterprise.

Most of the existing opinions of economists regarding the definition of intellectual capital can be divided into two main groups: intellectual capital is identified only with the human factor; intellectual capital is an expanded system, the processes and structure of which are represented by the search for optimum intellectual efficiency and relations between colleagues.

We define that intellectual capital is an aggregate of knowledge, experience, skills, creativity, abilities, relationships, accumulated in the process of intellectual activity, that have economic value and are used in the process of production and exchange for the purpose of obtaining income.

The way of intellectual capital management in an enterprise depends on the accepted concept of intellectual capital development, company strategy, and situational conditions, which in turn determine the volume and means of financing of intellectual capital development.

The process of intellectual capital management at an enterprise includes:

- 1) development of intellectual capital policy;
- 2) storage and holding of intellectual capital in the database;

- 3) increase, renewal, and distribution of intellectual capital;

- 4) protection of intellectual capital;

- 5) monitoring of intellectual capital.

The benefits that can be achieved through the effective management of intellectual capital and its proper financial support (Bell, 2004): 1) increase in the value of intellectual capital; 2) determination of requirements of knowledge, experience, and qualifications on the basis of the adopted strategy; 3) eliminating the possibility of repeating the same mistake; 4) promotion of innovation; 5) use of existing knowledge; 6) adaptation of new knowledge to the company's needs; 7) more efficient use of information and technical resources; 8) provision of development, maintenance, and protection of resources; 9) promoting the creation of knowledge and innovation through each employee; 10) application of knowledge for planning and achieving goals and objectives; 11) exchange of knowledge, their collection and distribution in the appropriate place; 12) modifying the activities and reorganizing the organization in such a way that the organization more effectively applies knowledge, minimizes the lack of knowledge, develops knowledge that increases the value of products and services; 13) management and control of future knowledge; 14) more effective use of innovations; 15) results of research and development, strategic alliances.

At the present stage, the inalienable policy of each state is the formation of "knowledge potential" and a breakthrough to a higher level of "knowledge society". In an inefficient economy of Ukraine, we must deviate from inefficient financing, which triggers many of the weaknesses. It is necessary to facilitate the implementation of an innovative breakthrough,

cultivating the development of special funds for supporting youth entrepreneurship in the context of regional programs, improving the system of grants for research institutions and individual scientists, based on improving the efficiency of using their intellectual resources at the expense of creativity.

It is also necessary to improve university science in carrying out research and development, financing mechanisms for the development of science, improving the quality of scientific development, development of integration processes in the scientific sphere, participation in research programs, grants, increasing cooperation of scientists, private firms, and sponsors, activation of the influx of young people into science (Ilnitsky, 2015).

Here are some indicators of the world's largest companies focusing their strategy on industrial indicators of the economy and knowledge economy.

As you can see, the definition of Tobin's q ratio, as an analytical indicator of the investment attractiveness of the company, shows that companies focused on the digital society and knowledge economy have a higher level of competitiveness and market attractiveness. The stability of its value to a large extent depends on the existence of inter-firm goodwills, which are difficult to determine from the book value but reflect the market sensitively.

The main source of financial support for the development of intellectual capital at enterprises is their own sources, while foreign investment, state support, accumulation of financial resources in the stock markets, and crowdfunding in aggregate occupy no more than 12%, which indicates that external resources are almost not used (Lukyanenko, Dvornik, 2018).

Having analysed the sources of financing, one can conclude that insufficient financial support for the development of intellectual capital is associated with the nationwide instability of the economic system,

which reduces the attractiveness of innovative projects. Instead, state provision does not meet the needs of the modern intellectual capital market in Ukraine. Therefore, it is expedient to optimize the structure of sources of funding through the use of new mechanisms and tools for attracting resources.

It must be understood that focusing on own financial resources has significant disadvantages and constrains the overall development of intellectual capital both individually and in Ukraine as a whole. Moreover, alternative methods of financing, accumulation of financial resources in stock markets are nothing else than the issuance of securities, and crowdfunding is a venture financing that involves attracting private funds to the development of innovation projects or enterprises, contributing to the development of intellectual capital. It is a truly progressive and effective financial support method since it allows the use of Internet resources and online trading platforms. Today, crowdfunding is a highly effective investment tool. It is functional, accessible, and easy both for organizations and for ordinary citizens. Many crowdfunding projects in the countries of the European Union and other developed countries are aimed at financing innovations. The Ukrainian crowdfunding market is only at the stage of origin, and the development of crowdfunding in Ukraine is an urgent need for the development of entrepreneurship of various sizes, the formation and introduction of innovative products.

Therefore, the issue of financing the development of intellectual capital has been updated in recent years, however, incorrect allocation of funds, dissatisfaction with the needs of the market, and the lack of a well-established system do not allow replacing obsolete forms, thereby worsening the state of the economy.

The role of the main elements of intellectual capital is increasing, which in one way or another implies its revaluation in the information society. Business

Table 1

Indicative analysis of individual indicators of companies with different strategic priorities (focus on the traditional economy, focus on knowledge economy)

The company name	Company assets (billion dollars)	Number of employees (thousand people)	R&D expenses (ratio to the number of employed, thousand dollars)	R&D expenses to sales volume (%)	Tobin's q ratio
Companies focused on the traditional economy					
DaimlerChrysler	372	441	14	2,9	0,42
General Motors	315	594	13,5	4,9	0,36
Ford Motor Company)	284	345	17,4	4,1	0,32
Nippon Steel	34	26,3	11,9	4,1	0,34
Companies oriented to knowledge economy					
Microsoft Corporation	59,5	50,6	86,6	16,9	2,39
Intel Corporation	44,4	80	36,8	9,4	1,47
International Business Machines Corporation (IBM)	88,3	319	16	5,5	1,9
Cisco Systems, Inc	35,2	35	63,4	10,8	1,42

Source: developed by the author based on (Lukyanenko, Dvornik, 2018)

is carried out through employees, strong trademark, advanced technology, corporate culture. They should be understood as a special type of knowledge flow between a person, a client, and an organizational capital, as well as an impact on the creation of value (Ilnitsky, 2015).

Knowledge is assets, therefore, as with all assets, it needs to be managed and their financing should be secured. And if the background of the enterprise allows partners to conclude that it is easy to work with then it is business capital, the benefits of which should be used as much as possible, while realizing at the same time the limited use of it. Many companies finance the development of new technologies that they believe will give them competitive advantages (Lukyanenko, Dvornik, 2018).

It is also necessary to pay special attention to the dual education and cooperation of the educational sector with the business sector. The experience of other countries proves that the emergence at the end of the last century in Europe of research or business universities that combine science and education on the basis of innovation and the principles of quality management is the best environment and determines innovative development. Such a model of innovation development was first proposed by Professor of Stanford University Henry Etzkowitz. It is based on the collaboration of the institution of higher education with business and combines innovation, research, education, allows the use of high technologies and bringing them to new markets. The institution of higher education of a business type is a "player" in the markets for educational services and products, knowledge-intensive services and works.

Also, companies, which products can be presented in digital form (for example, music, video games, computer software), have certain features. They are able to make all agreements entirely in the virtual trading space, delivering goods through the Internet to the buyer's computer. Sometimes even patents are registered that will deliberately not bring profit to their authors. So why not companies go the alternative way and finance the purchase of a technology license, instead of re-inventing it? One of the ways of reliable protection of new technologies is patenting.

Replacing visual communication by alternative also adds new opportunities for business development. Virtualization of interaction, management, and access to databases and knowledge expanded geographical, temporal, and linguistic horizons, reduced the costs of communication, coordination, education, and access to information.

Often, additional sources of funding may come to commercial organizations as a result of grants from the state, foreign and domestic partners on an adversarial basis, the creation of consortia of universities and government institutions to expand the scope of research. Or they come due to indirect financial support using financial instruments and mechanisms for the development of small business forms, as well as various forms of subsidizing and lending innovative products.

Particular attention also should be paid to the issue of financial support for the development of employees of enterprises as carriers of one of the main elements of intellectual capital – knowledge and skills. Only qualified and competent employees who work at the enterprise can realize the benefits of new technological solutions when they are already implemented. Now, de facto, there has been a global "modernization" of many spheres of production, a wide introduction of innovations from foreign experience, computerized machines, and automated technologies. That is, the employee has not to deal with the tasks that were before but to make decisions in a variety of difficult situations. Therefore, the financial support of professional training and professional development of employees allow significantly improving the quality of intellectual capital and become one of the important stages of investment.

The low educational and qualification level of employees leads to the emergence of situations where the business is provided by personnel at the expense of the invitation of workers from other countries. However, as a consequence of the necessity to pay ultra-high remuneration of labour in this case, it is much more profitable to invest financially in training and retraining of specialists from among those already working at this enterprise. Evidence in favour of this view is the possibility to receive services from qualified employees directly in the organization, as well as to send them to consult other enterprises for additional payment, which is an additional profit for the enterprise.

Given the above, it is important to bring practical benefits through consideration of the need for funding to enhance competitiveness. And it should be emphasized that, provided sufficient financial support for the development of intellectual capital, not only the enterprise but also the state as a whole obtain competitive advantages. However, the most interesting issue is why ensuring the financing of intellectual potential with high probability gives us the right to speak about the competitiveness of not only a separate enterprise but the entire country. Increasing the competitiveness of the whole country is possible only by improving the situation of a separate economic entity. That is, it is the realization of a common goal through an individual one, and it is possible to preserve the intellectual potential of the state while maintaining a level of competitiveness.

4. Conclusions

This study has proven that there is a great need for the proper financial provision of intellectual capital in the era of the information society, the knowledge society, and the knowledge economy that inherit each other. But over the imperfect distribution mechanism and the inappropriate choice of funding sources, the economic development is slowing down.

The conducted research allows generalizing the conclusion that exactly the development of information and communication technologies has led to the emergence of an information society, which was an impetus for the development of e-economy, which precisely determined the emergence of e-commerce as its inherent part.

It is proven that financing for the development of intellectual capital is required for many reasons; however, one of the keys is to raise the level of competitiveness not only of enterprises but of the state as a whole.

Thus, the intellectual potential of citizens is aimed at the economic, technical, and cultural development of enterprises and their own state. It follows that the support and development of the information society and its main good, namely, information and knowledge, should be actively implemented in enterprises for the further development of entrepreneurship, the economy of the country and the state. That is why the research of models of financial provision of intellectual capital needs to be given more attention as a promising direction for the development of science and practice.

References:

- Apatova, N. V. (2013). Riskologiya virtualnogo predprinimatelstva [The riskology of virtual entrepreneurship]. Simferopol: DIAPI. (in Ukrainian)
- Bell, D. (2004). Gryadushcheye postindustrialnoye obshchestvo: Opyt sotsialnogo prognozirovaniya [The coming of post-industrial society: The experience of social forecasting]. Ed. 2nd, rev. and add. [trans. from English]. Moscow: Academia.
- Bell, D. (1998). The Coming of Post-Industrial Society. NY: Basic Books.
- Baudrillard, J. (2013). Simulyakry i simulyatsiya [Simulacra and Simulation]. Tula: Tul'skiy poligrafist. 204 p.
- Brooking, A. (2001). Intellektualnyy kapital [Intellectual capital]. [trans. from English N. Mishkova]; by ed. L. N. Kovalik. SPb: Piter. 288 p.
- Castells, M. (1996-1998). The Information Age: Economy, Society and Culture. Oxford: Blackwell Publishing, vol. 3.
- Chaffey, D. (2011). E-Business and E-Commerce Management: Strategy, Implementation and Practice. 5-th ed. Harlow: Pearson, 2011. XXXI, 733 p.
- Chekina, K. V., Orlyk, O. V. (2015). Internet ta suchasni sposoby vedennya elektronnoho biznesu [Internet and modern ways of conducting e-business].
- Informatyka ta informatsiyni tekhnolohiyi: stud. nauk. konf., 20 kvitnya 2015 [Computer science and information technologies: stud. sciences Conf., April 20, 2015]. Odessa, ONEU-WITH, pp. 36-39.
- Drucker Peter. (2003). The age of discontinuity: guidelines to our changing society. London: Heinemann. 380 p.
- Diatlov, S. A., Maryanenko, V. P., Selishcheva, T. A. (2015). Informatsionno-setevaya ekonomika: struktura, dinamika, regulirovaniye: monografiya [Informational network economy: structure, dynamics, regulation: monographs]. Moscow: INFRA-M.
- Edvinsson, L., Malone, M. (1999). Intellektualnyy kapital. Opredeleniye istinnoy stoimosti kompanii. Novaya postindustrialnaya volna na Zapade: Antologiya [Intellectual Capital. Determination of the true value of the company. New post-industrial wave in the West: an anthology]. ed. V. L. Inozemtseva. Moscow: Academia.
- Ermoshenko, N. N. (1991). Rynok i informatsiya: vzaimosvyaz, stanovleniye i razvitiye [Market and information: interconnection, formation and development]. Informatsiya i rynek, no. 1, pp. 15-24.
- Horovyy, D. A. (2011). Virtualni ekonomichni vidnosyny ta yikh rol v suchasniy ekonomitsi [Virtual Economic Relations and Their Role in the Modern Economy]. Vestnyk Natsyonalnoho tekhnicheskoho unyversyteta "KHPY", vol. 8.
- Kalakota, R., Robinson, V. (2010). E-Business 2.0: Roadmap for Success. Moscow – Boston: Addison-Wesley, XXIV, 520 p.
- Ilynskyy, D. (2015). Universytety v hlobalniy ekonomitsi znan [Universities in the global knowledge economy]. Mizhnarodna ekonomichna polityka, no. 1(22), pp. 123-154.
- Karpus, I. N. (2011). Derzhavna investytsiyna polityka ta mekhanizm yiyi realizatsiyi: monografiya [State investment policy and mechanism of its realization: monograph]. Lviv: RVB NLTU of Ukraine, 348 p.
- Khanin, I. H. (2012). Informatsiyno-tekhnolohichni peredumovy formuvannya postindustrialnoho suspilstva yak kontseptsiyi novoyi hlobalnoyi tsyvilizatsiyi [Information and technological prerequisites for the formation of postindustrial society as a concept of a new global civilization]. Efektyvna ekonomika, no. 9. Retrieved from: <http://www.economy.nayka.com.ua/?op=1&z=1765>
- Klymko, S. H., Pryhoda, V. M., Syzonenko, V. O. Lyudskyy kapital: svitovyy dosvid i Ukrayina [Human capital: world experience and Ukraine]. Kyev: Osnovy.
- Laudon, K. C., Laudon, J. P. (2012). Management Information Systems: Managing the Digital Firm. 12-th ed. Global edition. Boston: Pearson, 630 p.
- Masuda, Y. (1983). The Information Society as Postindustrial Society. Wash.: World Future Soc.
- Lukyanenko, O., Dvornyk, I. (2018). Intellektualnyy kapital v strukturi hlobalnoyi ekonomiky Mizhnarodna ekonomichna polityka [Intellectual capital in the structure of the global economy International economic policy], №1(28). Retrieved from: http://iejournal.com/journals/28/2018_4_Lukyanenko_Dvornik_Kolechko.pdf

- Matvieiev, I. A. (2012). Elektronnaya ekonomika: sushchnost i etapy razvitiya [E-economy: the nature and stages of development], №6(42). Retrieved from: <http://uecs.ru/makroekonomika/item/1427-2012-06-29-06-02-49>
- Martyniuk, O. A. (2015). Rozvytok informatyzatsiyi u hlobalnomu ekonomichnomu prostori [Development of Informatization in the Global Economic Space]. Naukovi zapysky Mizhnarodnoho humanitarnoho universytetu. Odessa: International Humanitarian University, vyp. 24, 186 p.
- Poster, M. (1997). Cyberdemocracy: Internet and the Public Sphere. Internet Culture. Ed. by Porter D. New York, 1997.
- Porat, M. (1999). The Information Economy. Marc Uri Porat. Washington, DC: US Department of Commerce, 556 p.
- Radionova, I. (2008). Ekonomichne zrostannya za uchastyu lyudskoho kapitalu [Economic growth with the participation of human capital]. Economy of Ukraine, no. 10, pp. 19-30. (in Ukraine)
- Rakitov, A. (1991). Filosofiya kompyuternoy revolyutsii [The philosophy of the computer revolution]. Moscow: Politizdat, 287 p.
- Robertson, R. (1992). The twofold process of the particularization of the universal and the universalization of the particular. Globalization: Social Theory and Global Culture, London, pp. 177-178.
- Toffler, A. (1980). The Third Wave. New York: Morrow, 544 p.
- Toffler, A. Tretya khvylya. Suchasna zarubizhna sotsialna filosofiya. Khrestomatiya: Navch. Posibnyk [Third wave. Contemporary foreign social philosophy. Textbook: Teach. Manual]. Kyiv: Lybid. (in Ukraine)
- Ushakova, S. Y., Bukhanova, Yu. A. (2015). Investitsionnyy aspekt stimulirovaniya effektivnogo ispolzovaniya intelektualnogo kapitala strany: zarubezhnyy i otechestvennyy opyt. [The investment aspect of stimulating the effective use of the intellectual capital of the country: foreign and domestic experience]. Nauka. Innovatsii. Obrazovaniye, no. 18, pp. 138-167.
- Van der Mark W. (2011). Marketing.com: E-commerce, social media, and mobile Internet in practice / Translation: J. Naeije and NHTV (Nederlandse Hogeschool voor Toerisme). 1-st ed. Houten: Noordhoff Uitgevers, 141 p.
- Vynaryk, L. S., Shchedryn, A. N., Vasyleva, N. F. (2007). Onlaynovyy elektronnyy biznes: Monografiya [Online e-business: Monograph]. Donetsk, NAS of Ukraine. (in Ukraine)
- Vysotska, V. A. (2008). Osoblyvosti proektuvannya ta vprovadzhennya system elektronnoyi komertsyi [Features of designing and implementation of e-commerce systems]. Visnyk natsionalnoho universytetu «Lvivska Politehnika». Kompyuterni nauky ta informatsiyi tekhnolohiyi, no. 629, pp. 34-45.