

**Prunenکو Dmitro**

*O.M. Beketov National University of Urban Economy in Kharkiv, Ukraine*

## **INTELLECTUAL CAPITAL AS A MODERN TOOL FOR THE FORMATION OF INFORMATION AND ANALYTICAL SUPPORT FOR THE DEVELOPMENT OF CONSTRUCTION ENTERPRISES**

*It is proved that intellectual capital in developed economic systems is one of the main assets that affects the functioning of enterprises. It is established that the topical issue is the definition of intellectual capital as a modern tool for the formation of information and analytical support for the development of construction companies (BP).*

*The purpose of the research on the definition of intellectual capital as a modern tool for the formation of information and analytical support for the development of construction enterprises has been achieved.*

*To achieve this goal, the following tasks have been solved: determining the intellectual capital of construction companies; characteristics of the elements of intellectual capital of construction companies; formation of tools for the formation of information and analytical support for the management of intellectual capital of construction companies.*

*It is determined that the intellectual capital of construction companies is a category that has a complex structure and is characterized by a set of functional, cost, urban, spatial and features, which as a result of constant transformations form the relevant knowledge, skills, experience of workers to create an intelligent product. attractiveness, competitiveness and efficiency of activities based on interaction between customers, investors, contractors, public authorities and BP. Elements of construction capital are defined. The tools of formation of information-analytical support of development of construction enterprises are singled out.*

**Keywords:** *construction enterprises, intellectual capital, elements of intellectual capital, information and analytical support.*

### **Introduction**

Intellectual capital in developed economic systems is one of the main assets that affects the functioning of enterprises. According to experts, the share of intellectual capital in the asset structure of the most developed international companies is almost 80%. The presented capital provides opportunities to increase the value of the business, increase the efficiency of work potential, given the modern economic tools.

In domestic practice, the use of intellectual capital in the activities of enterprises is characterized by insufficient levels, certain imbalances and imbalances. In particular, the structural components of intellectual capital are not fully defined, the policy of ensuring labor potential in accordance with labor productivity, the introduction of intellectual property in the production process, reducing the effectiveness of development and implementation of brand policy is implemented at a low level. Reducing the efficiency of intellectual capital inhibits the development of stakeholder relations in enterprises. Similar trends characterize the formation and use of intellectual capital in construction companies. Thus, the topical issue is the definition of intellectual capital as a modern tool for the formation of

information and analytical support for the development of construction companies.

### **Analysis of existing research**

Directions of formation and use of intellectual capital are presented in the developments: K. Andryushchenko [1], O. Berveno [2], E. Brooking [3], V. Geets [4], E. Hrytskova [5], A. Yeremenko [6], A. Zharinova [7], S. Ilyashenko [8], O. Kendyukhov [9], K. Mamonov [10], T. Stewart [11], A. Chukhno [12], L. Edvinson [13] and others.

At the same time, the issues concerning the directions and features of the use of intellectual capital in construction enterprises as a modern tool for their development remain unresolved.

### **The objectives of the study**

The purpose of the study is to determine the intellectual capital as a modern tool for the formation of information and analytical support for the development of construction companies.

Achieving this goal lies in the plane of solving the following tasks:

- determination of intellectual capital of construction enterprises;

- characteristics of the elements of intellectual capital of construction companies;
- formation of tools for the formation of information and analytical support for the management of intellectual capital of construction companies.

### **Main part**

The formation and use of intellectual capital in the construction industry is characterized by features that affect the theoretical approaches to its definition. In particular, it should be noted the features associated with the technological characteristics of construction companies, which are divided into general construction and specialized and include construction companies, trusts, joint stock companies.

The formation of intellectual capital and determining the level of effectiveness of its use in construction companies are influenced by the directions, opportunities and conditions for creating financial results under construction contracts. Realization of relations concerning possibilities of use of intellectual capital in capital construction is carried out on the basis of the contract, in which one party (contractor) undertakes the forces and means to the order of the other party (customer) to construct and hand over to the customer in due time to the design and estimate documentation or perform construction and other works stipulated by the contract, and the customer undertakes to submit to the contractor the approved design and estimate documentation, provide him with a construction site, accept the completed objects and pay for them [14].

Under the contract for the performance of research or research and development and technological work, the customer is obliged to:

- 1) issue a technical task to the executor and agree with him the program (technical and economic indicators) or the subject of works;
- 2) to transfer to the executor the information necessary for performance of works;
- 3) accept the work performed and pay for them.

The customer undertakes to accept the work performed, pay for it [15];

- contractor: under the contract for research or research and development and technological work, the contractor (performer) undertakes to conduct research on behalf of the customer, develop a sample of a new product and design documentation for it, new technology and more.

The Contractor is obliged to conduct research in person, unless otherwise provided by the contract for the performance of research or development and technological work. The Contractor has the right to involve other persons in the performance of research work only with the consent of the customer. The Contractor has the right to involve other persons

(subcontractors) in the performance of research and development and technological work, unless otherwise provided by contract. The contractor is obliged to fully transmit the results of the work. The Contractor has the right to use the result of the work obtained by him also for himself, unless otherwise provided by contract [15].

To determine the financial result for the implementation of the construction contract at the enterprise of particular importance is the assessment of income and expenses, changes in which are agreed with different groups of stakeholders. At the same time, special attention is focused on the degree of incompleteness of construction contracts, methods of determining the completion of construction works, the cost of subcontracted work, the characteristics of gross debt of customers, contractors and other enterprises.

The peculiarities of the use of intellectual capital in the construction sector include the fact that investment and financing of housing construction with the use of private funds raised from individuals and legal entities, including management, can be carried out only through construction financing funds, funds of operations with real estate, mutual investment institutions, as well as through the issuance of target bonds of enterprises, the fulfillment of obligations under which is carried out by transferring the object (part of the object) of housing construction [16].

To determine the intellectual capital of construction companies is characterized by a list of urban factors that affect their functioning.

The formation and use of intellectual capital of construction companies is influenced by spatial factors of land location and location of construction sites:

- functional, which depend on the areas of accessibility to construction sites;
- engineering and infrastructure, which are formed in accordance with the level of centralized water and heat supply, sewerage, gas supply;
- engineering-geological, which are characterized by engineering and geological features of the location of land used for construction;
- historical and cultural, determined by the zones of regulation of buildings, historical landscape, protection of individual monuments;
- natural-landscape, which are characterized by the location of the land plot within the lands of nature protection (national, zoological and dendrological parks, parks-monuments, garden-park art, botanical gardens, reserves, protected tracts, natural monuments), health and recreational purpose;
- sanitary and hygienic, due to the location in the sanitary protection, water protection, building restrictions on the level of electromagnetic field voltage, exceeding the permissible noise level from railways, roads, power substations, airfields, in the area of soil contamination [17].

The formation and use of intellectual capital is influenced by cost, functional, urban, spatial factors that ensure investment attractiveness, competitiveness and efficiency of construction companies. It should be noted that the identification of IC with intangible assets is inappropriate, as such an approach narrows the very nature of intellectual capital, the possibility of its application in the enterprise and, in general, does not take into account other structural elements of the represented capital.

In scientific developments there are no uniform approaches to determining the intellectual capital of construction companies. Thus, Yu. Tararyev considers it as a tangible asset, which is determined by the objects of property rights, aimed at obtaining economic results in the long run [18, p. 6].

Sharing the theoretical positions of scientists who characterize intellectual capital as a set of knowledge and skills, Yurchenko focuses on its strategic nature, which provides value formation and strategic renewal of construction companies [19].

A similar approach is presented in the works of E. Grytskov, who defines the intellectual capital of construction companies as «a strategic asset formed from a set of knowledge, skills, abilities, experience of workers, organizational capacity of BP management, relationships between construction customers and other stakeholders and are determined by functional, structural, cost characteristics, which are aimed at ensuring the development of construction companies» [5, p. 125–127; 10, p. 241].

Sharing the provisions of this approach, N. Kuzmich considers intellectual capital as a set of knowledge, skills, experience of workers that affect the formation and use of resources of the construction company and provide its competitive advantages [20].

In the context of the presented approach, the point of view of K. Mamonov deserves attention, which defines the intellectual capital of construction enterprises as a system of characteristics, signs, knowledge, skills and abilities that take tangible, intangible, monetary forms, provide an intellectual product to gain competitive advantage. Satisfying the interests of stakeholders who interact with construction companies and bring economic benefits over a long period of time [21, p. 423].

In contrast to the presented approaches, D. Serobyann defines intellectual capital from the standpoint of realizing the possibilities of its formation and use to ensure the competitiveness of construction companies [22].

A similar approach is presented in the works of O. Tarasevich, who characterizes intellectual capital as a basis for ensuring the competitiveness and dynamic potential of construction companies, which aims to

create economic benefits and is more important than tangible assets [23, 24].

According to the author, the main factors determining the formation and use of intellectual capital in construction companies are there is knowledge and information created by human resources.

Thus, intellectual capital is a concept that has a complex structure that determines the intellectual abilities of people, in conjunction with the tangible and intangible means created by them, which are used in the operation of enterprises. In addition, IC is influenced by information and knowledge, which play the role of a «collective brain» that accumulates scientific and everyday knowledge of employees, intellectual property and experience, communication and organizational structure, information networks and enterprise image.

Thus, summarizing the existing theoretical and methodological approaches, the author substantiates the economic and managerial content of the category «intellectual capital of construction companies», which is considered as a category with a complex structure and characterized by a set of functional, cost, urban, spatial and features. form the relevant knowledge, skills, experience of workers to create an intelligent product that will increase investment attractiveness, competitiveness and performance through interaction between customers, investors, contractors, government agencies and BP.

As a result of the study, the elements of intellectual capital of construction enterprises are proposed (Table 1).

Table 1  
Structural components of intellectual capital of construction enterprises

Structural components	Elements of structural components
Human capital	knowledge, skills, abilities, creative and professional abilities, moral and cultural values, experience, opportunities to realize abilities at a construction company, level of team work, level of qualification, level of staff competence
Intellectual Property	level of use of computer programs, patents, inventions, models, experimental connections, know-how
Organizational capital	organizational and managerial structure, corporate culture, external and internal connections
Brand capital	trademark, brand of construction company, copyright, corporate reputation
Market assets	intangible assets related to market operations, construction contracts and agreements

Investment and innovation capital	investments, innovations aimed at the formation and implementation of intellectual capital to ensure the development of construction companies
Social capital	the level of social responsibility of construction companies, the formation and implementation of social protection
Stakeholder relationships	groups of stakeholders (stakeholders) that interact with BP: managers of different levels and owners of construction companies; BP workers; shareholders; internal controlling bodies; external controlling bodies; credit and other financial institutions, developers; public administration bodies and local government bodies; customers; investors; developers; contractors; designers; suppliers of inventory; public and self-regulatory organizations operating in construction; organizations and companies that provide information support for the operation of construction companies
Information support	Corporate information systems, economic information, information security systems, means of corporate communications, technical information, design and estimate documentation

Construction of a system of information and analytical support of management processes should be structured and systematized. The algorithm for building a system of information and analytical support of intellectual capital management is presented in the following stages:

1). Collection and pre-processing of information. Relevant information is selected in accordance with the constructed scheme of information and analytical support and strategic goals, namely: the results of financial and economic reporting, legal documentation, statistics on intellectual capital: turnover and changes in staff structure, intellectual property, budget and design documentation, investment flows, bank documents, marketing component, etc. The information is analyzed and pre-processed. Only information relevant to the information-analytical support process is used.  
2). Carrying out analytical processing. The input information is transformed into the source data, which will be the basis for calculating the resulting indicators, which will be the basis for management decisions.  
3). Interpretation of the results of analytical information processing for forecasting and planning in accordance with the set strategic goals.  
4). Development of strategic directions of intellectual capital management on the basis of the analysis of information and analytical support.

According to the analysis conducted in the previous section, the feasibility of managing business processes of economic entities in accordance with the stages of their life cycle or stages of the life cycle of projects that they implement. Thus, the theoretical and methodological platform includes a system of information and analytical support for assessing the formation and use of intellectual capital and strategy for its management in construction companies in the form of dependence of the stages of system formation on the life cycle stages of the construction project: 1). Pre-investment stage. Is to find investment to implement a new construction project. According to the stages of the life cycle, investments are withdrawn at the expense of excess profits of the construction project, which is in the stage of maturity and is characterized by excess profits. During this period, design and estimate documentation is developed, the analysis of the compliance of the existing staff of the enterprise to the needs of the future project, the possible use of the latest technologies developed or involved by the enterprise to improve the efficiency of construction work. 2). Designing. The initial stages of construction projects are accompanied by high risks. The design phase should be accompanied by the provision of an information management strategy that could assess the risks of the project and ensure that ways to minimize and eliminate them are planned. This information can be obtained from the external environment by analyzing external factors and identifying the dynamics and «bottlenecks» of production development and the introduction of corrective influences on the functioning of the IC BP. 3). Construction – a contractor receives funding for construction work by attracting investment from customers. The works are financed in stages. The analysis of the estimate and design documentation and the information resources which have formed its basis is carried out. 4). The final stage includes the commissioning of the building and the appropriate execution of all permits, closing the project.

Thus, the creation of a system of information and analytical support for assessing the formation and use of intellectual capital and its management strategy in construction companies is an important step in developing a theoretical and methodological platform that should meet the specifics of construction, take into account the development of intellectual capital goals and objectives. The definition of structural elements and their systematization for the formation of information and analytical support of management is characterized by trends in the development of the sphere, as well as aimed at solving key problems facing managers. In the context of the development of theoretical and methodological platform for determining the components of the system of information and analytical support and characteristics of their structure and

interdependencies is carried out on the basis of SWOT-analysis of the internal and external environment of construction companies. The analysis identified the strengths and weaknesses of the internal environment of construction companies.

Within the framework of information and analytical support are determined:

- regulatory framework;
- technical tools:
- directions of formation of technical protection of the information which are characterized by definition and the analysis of threats, development of system of protection of the information; implementation of the information protection plan; control of functioning and management of information protection system [25];

- areas of technical protection of information, determined by the implementation of a single technical policy, the creation and development of a single terminological system; formation of multilevel information protection systems based on mutually agreed provisions, rules, methods, requirements and norms, development and implementation of certification, licensing and certification systems in accordance with information security requirements, development of services in the system of technical information protection, establishing the order of development, manufacture, operation providing technical protection of information and special control and measuring equipment, organization of design of construction works in terms of providing technical protection of information, development of human capital in the system of technical protection of information [25];

- the impact on information leakage channels is based on the formation and implementation of technical measures to block information leakage through: various groups of stakeholders interacting in the field of formation and use of intellectual capital of construction companies; radio channels; acoustic; electric; visual-optical; material;

- individual technical information protection includes systems: delimitation and access to information; personification, identification and authentic conformity; audit and monitoring; antivirus protection;

- communication systems of information protection are formed and implemented on the basis of application:

- tools to block information attacks from the external and internal environment of construction companies (Cisco PIX Firewall, Symantec Enterprise Firewall TM, Contivity Secure Gateway and Alteon Switched Firewall from Nortel Networks);

- technical means against unauthorized and unreasonable influence on information flows and

networks (CiscoSecure IDS, IntruderAlert and NetProwler from the Symantec company);

- tools for creating secure channels by building virtual private networks (Symantec Enterprise VPN, Cisco IOS VPN, Cisco VPN concentrator); means of identifying sources of information danger, analysis of areas of information threats (Symantec Enterprise Security Manager, Symantec Net Recon);

- complex software and hardware of information protection;

- functional component includes: counteraction to information confrontation is characterized by the use of tools to influence the systems of formation, processing, dissemination and storage of enemy information, the use of measures to protect information systems from external and internal threats; prevention or counteraction to information wars is characterized by the formation of the system and the use of tools of complex influence on the information environment of the enemy to ensure information benefits; Violation of the system of formation and use of information is carried out by defining and applying information technical tools and organizational forms to counteract violations.

## Conclusions

The development and implementation of information and analytical support at construction enterprises is proposed to be carried out through the use of: information tools that allow to form an information basis for the formation and use of intellectual capital; intelligent information systems aimed at forming a database through the use of problem-oriented packages, statistical data analysis programs, means of intellectualizing the level of access to the database, heuristic tools for solving problems, analysis and forecasting of management in construction companies; analytical tools that allow to form a quantitative basis for management decisions on the formation and use of intellectual capital of construction companies.

## Література

1. Андрущенко К. А. *Інтелектуальний капітал підприємства: сучасні тенденції оцінювання та управління* / Науковий вісник національної академії статистики, обліку та аудиту. 2015. №2. С. 53–60.
2. Бєрвєно О. В. *Інтелектуальний капітал: економічний зміст і особливості формування в транзитивному суспільстві: автореф. дис... канд. екон. наук: 08.01.01* / Харківський національний ун-т ім. В. Н. Каразіна, 2002. 19 с.
3. Брукінг Э. *Інтелектуальний капітал*. СПб.: Питер, 2001. 128 с.
4. Гєсєць В. *Економіка знань та перспективи її розвитку для України* / НАН України. Ін-т екон. прогнозів. К., 2005. 426 с.
5. Грицьков Є. В. *Організаційно-економічне забезпечення управління інтелектуальним капіталом на будівельних підприємствах: дис... канд. екон. наук: 08.00.04* /

Харківський національний університет міського господарства імені О.М. Бекетова, 2016. 248 с.

6. Єременко А. В. Интеллектуальный капитал как основна домінта нематеріальних активів. Формування ринкових відносин в Україні: зб. наук. праць. 2013. №7. С. 60–64.

7. Жарінова А. Г., Чубукова О. Ю. Інститут інтелектуальної власності в глобальному вимірі / Вісник КНУТД. Серія: Економічні науки. 2015. № 2. С. 28–33.

8. Ілляшенко С. М. Сутність, структура і методичні основи оцінки інтелектуального капіталу підприємства / Економіка України. 2008. № 11. С. 16–26.

9. Кендюхов А. В. Концепція організаційно-економічного механізму управління інтелектуальним капіталом підприємства. Наук. праці ДонНТУ. 2003. С. 56–62.

10. Мамонов К. А., Грицьков Є. В. Интеллектуальный капитал будівельних корпоративних підприємств: визначення та напрями трансформації: монографія. Системи прийняття рішень в економіці, техніці та організаційних сферах: від теорії до практики: колективна монографія. Павлоград: Арт синтез-Т, 2014. У 2-х т. Т. 1. 436 с.

11. Стюарт Томас А. Интеллектуальный капитал. Новый источник богатства организаций. Пер. с англ. В. Ноздриной. М.: Поколение, 2007. 368 с.

12. Чухно А. Интеллектуальный капитал: сутність, форми та закономірності розвитку / Економіка України. 2002. № 11–12.

13. Edvinsson L. Developing Intellectual Capital at Skandia / Long Range Planning. 1997. № 3. Vol. 30. P. 366–373.

14. Господарський кодекс України від 16.01.2003 № 436-IV. URL: <http://zakon3.rada.gov.ua/laws/show/436-15/page10>

15. Цивільний кодекс України від 16.01.2003 № 435-IV. URL: <http://zakon3.rada.gov.ua/laws/show/435-15>

16. Про інвестиційну діяльність. Закон України від 18.09.1991 № 1560-XII. URL: <http://zakon3.rada.gov.ua/laws/show/ru/1560-12>

17. Про планування та забудову територій. Закон України №1699-III від 20 квітня 2000 року. URL: <http://zakon4.rada.gov.ua/laws/>

18. Тараруєв Ю. О. Удосконалення механізму оцінки інтелектуальних активів будівельних підприємств: автореф... канд. екон. наук: 08.00.04 / Харківська національна академія міського господарства, 2008. 21 с.

19. Юрченко Ю. Управління інтелектуальним капіталом будівельних підприємств в умовах інноваційного розвитку: дис... канд. екон. наук: 08.00.04 / Київський національний університет будівництва та архітектури, 2012. URL: <http://mydisser.com/ua/catalog/view/45/769/13731.html>.

20. Кузьмич Н. П. Развитие человеческого капитала как условие реализации инновационного потенциала строительных предприятий. URL: [http://teoria-practica.ru/rus/files/arhiv\\_zhurnala/2013/6/ekonomika/kuzmic\\_h.pdf](http://teoria-practica.ru/rus/files/arhiv_zhurnala/2013/6/ekonomika/kuzmic_h.pdf)

21. Мамонов К. А. Стейкхолдерна стратегія вартісно-орієнтованого управління капіталом бренду будівельних корпоративних підприємств: дис... д-ра екон. наук: 08.00.04 / Харківська національна академія міського господарства, 2013. 557 с.

22. Серобян Д. Л. Управление объектами интеллектуального капитала строительных предприятий: дисс... канд. екон. наук: 08.00.05 / Санкт-Петербургский государственный экономический университет, 2015. URL:

[http://unecon.ru/sites/default/files/dissertaciya\\_serobyan\\_dzhon\\_levonovich\\_1.pdf](http://unecon.ru/sites/default/files/dissertaciya_serobyan_dzhon_levonovich_1.pdf)

23. Тарасевич Е. А. Интеллектуальный капитал строительной организации в обеспечении ее конкурентоспособности. URL: <https://cyberleninka.ru/article/v/intellektualnyy-kapital-stroitelnoy-organizatsii-v-obespechenii-ee-konkurentosposobnosti>

24. Тарасевич Е. А. Разработка концепции диагностирования интеллектуального капитала строительной организации как условия обеспечения ее конкурентоспособности: автореф... канд. екон. наук: 08.00.05 / ГОУ ВПО «Санкт-Петербургский государственный архитектурно-строительный университет». 22 с. URL: <https://www.google.com.ua/url?sa=t&rct=j&q=&esrc=s&source=web&cd=18&>

25. Держаний стандарт України Захист інформації. Технічний захист інформації. Основні положення. ДСТУ 3396.0-96. URL: [http://www.dsszsi.gov.ua/dsszsi/control/uk/publish/article?art\\_id=38883&cat\\_id=38836](http://www.dsszsi.gov.ua/dsszsi/control/uk/publish/article?art_id=38883&cat_id=38836)

## References

1. Andryushchenko K.A. (2015) Intellectual capital of the enterprise: modern trends in evaluation and management. *Scientific Bulletin of the National Academy of Statistics, Accounting and Auditing*, 53–60.

2. Berveno O.V. (2002) Intellectual capital: economic content and features of formation in a transitive society. Abstract for the degree of Candidate of Economic Sciences in the specialty: 08.01.01, 19.

3. Brooking E. (2001) Intellectual capital, 128.

4. Geets V. (2005) The knowledge economy and prospects for its development for Ukraine, 426.

5. Grytskov E. (2016) Organizational and economic support of intellectual capital management at construction enterprises. Abstract for the degree of Candidate of Economic Sciences in the specialty: 08.00.04, 21.

6. Eremenko A.V. (2013) Intellectual capital as the main dominant of intangible assets. 7, 60–64.

7. Zharinova A.G., Chubukova O.Y. (2015) Institute of intellectual property in the global dimension. *Bulletin of KNUITD. Series: Economic Sciences*. 2, 28–33.

8. Ilyashenko S.M. (2008) The essence, structure and methodological basis for assessing the intellectual capital of the enterprise. *Economy of Ukraine*. 11, 16–26.

9. Kendyukhov A.V. (2003) The concept of organizational and economic mechanism of management of intellectual capital of the enterprise, 56–62.

10. Mamonov K.A., Grytskov E.V. (2014) Intellectual capital of construction corporate enterprises: the definition and direction of transformation: monograph, 436.

11. Stuart Thomas A. (2007) Intellectual capital. A new source of wealth for organizations, 368.

12. Chukhno A. (2002) Intellectual capital: essence, forms and patterns of development. *Economy of Ukraine*. 11–12.

13. Edvinsson L. (1997) Developing Intellectual Capital at Skandia. *Long Range Planning*. 3, 366–373.

14. Economic Code of Ukraine of 16.01.2003 № 436-IV. URL: <http://zakon3.rada.gov.ua/laws/show/436-15/page10>

15. Civil Code of Ukraine of 16.01.2003 № 435-IV. URL: <http://zakon3.rada.gov.ua/laws/show/435-15>.

16. About investment activity. Law of Ukraine of September 18, 1991 № 1560-XII. URL: <http://zakon3.rada.gov.ua/laws/show/ru/1560-12>
17. On planning and development of territories. Law of Ukraine №1699-III of April 20, 2000. URL: <http://zakon4.rada.gov.ua/laws/>
18. Tararuyev Y.O. (2008) Improvement of the mechanism of estimation of intellectual assets of construction enterprises. Abstract for the degree of Candidate of Economic Sciences in the specialty: 08.00.04, 10.
19. Yurchenko Yu. (2012) Management of intellectual capital of construction enterprises in the conditions of innovative development. Abstract for the degree of Candidate of Economic Sciences in the specialty: 08.00.04. URL: <http://mydisser.com/en/catalog/view/45/769/13731.html>
20. Kuzmich N.P. Development of human capital as a condition for the realization of the innovative potential of construction enterprises. URL: [http://teoriapractica.ru/rus/files/arhiv\\_zhurnala/2013/6/ekonomika/kuzmich.pdf](http://teoriapractica.ru/rus/files/arhiv_zhurnala/2013/6/ekonomika/kuzmich.pdf)
21. Mamonov K.A. (2013) Stakeholder strategy of value-oriented capital management of the brand of construction corporate enterprises. Dissertation for the Doctor of Economic Sciences specialty: 08.00.04, 557.
22. Serobyann D.L. (2015) Management of objects of the intellectual capital of the construction enterprises. Dissertation for the Candidate of Economic Sciences specialty: 08.00.05. URL: [http://unecon.ru/sites/default/files/dissertaciya\\_serobyann\\_dzhon\\_levonovich\\_1.pdf](http://unecon.ru/sites/default/files/dissertaciya_serobyann_dzhon_levonovich_1.pdf)
23. Tarasevich E.A. Intellectual capital of a construction organization in ensuring its competitiveness. URL: <https://cyberleninka.ru/article/v/intellektualnyy-kapital-stroitelnoy-organizatsii-v-obespechenii-ee-konkurentosposobnosti>
24. Tarasevich E.A. Development of the concept of diagnosing the intellectual capital of a construction organization as a condition for ensuring its competitiveness. Abstract for the degree of Candidate of Economic Sciences in the specialty: 08.00.05, 22. URL: <https://www.google.com.ua/url?sa=t&rct=j&q=&esrc=s&source=web&cd=18&>
25. State standard of Ukraine Information protection. Technical protection of information. Substantive provisions. DSTU 3396.0-96. URL: [http://www.dsszzi.gov.ua/dsszzi/control/uk/publish/article?art\\_id=38883&cat\\_id=38836](http://www.dsszzi.gov.ua/dsszzi/control/uk/publish/article?art_id=38883&cat_id=38836)

**Рецензент:** д-р екон. наук, проф., проф. каф. земельного адміністрування та геоінформаційних систем Мамонов К.А., Харківський національний університет міського господарства імені О.М. Бекетова, Україна.

**Автор:** ПРУНЕНКО Дмитро Олександрович *д.е.н., доцент кафедри транспортних систем і логістики Харківський національний університет міського господарства імені О. М. Бекетова*  
E-mail – [prunenok@rambler.ru](mailto:prunenok@rambler.ru)

## ІНТЕЛЕКТУАЛЬНИЙ КАПІТАЛ ЯК СУЧАСНИЙ ІНСТРУМЕНТ ФОРМУВАННЯ ІНФОРМАЦІЙНО-АНАЛІТИЧНОГО ЗАБЕЗПЕЧЕННЯ РОЗВИТКУ БУДІВЕЛЬНИХ ПІДПРИЄМСТВ

Д.О. Пруненко

Харківський національний університет міського господарства імені О.М. Бекетова, Україна

*Доведено, що інтелектуальний капітал у розвинених економічних системах є одним з основних активів, що впливає на функціонування підприємств. Встановлено, що актуальним питанням є визначення інтелектуального капіталу як сучасного інструменту формування інформаційно-аналітичного забезпечення розвитку будівельних компаній (ВР).*

*Досягнуто мети дослідження визначення інтелектуального капіталу як сучасного інструменту формування інформаційно-аналітичного забезпечення розвитку будівельних підприємств.*

*Для досягнення цієї мети вирішено такі завдання: визначення інтелектуального капіталу будівельних компаній; характеристика елементів інтелектуального капіталу будівельних компаній; з'ясування інструментів формування інформаційно-аналітичного забезпечення управління інтелектуальним капіталом будівельних компаній.*

*Визначено, що інтелектуальний капітал будівельних компаній – це категорія, що має складну структуру і характеризується сукупністю функціональних, вартісних, містобудівних, просторових та особливостей, які в результаті постійних перетворень формують відповідні знання, навички, досвід для створення інтелектуального продукту, привабливість, конкурентоспроможність та ефективність діяльності, заснованої на взаємодії між замовниками, інвесторами, підрядниками, державними органами та ВР. Визначено елементи будівельного капіталу. Виокремлено інструменти формування інформаційно-аналітичного забезпечення розвитку будівельних підприємств.*

**Ключові слова:** будівельні підприємства, інтелектуальний капітал, елементи інтелектуального капіталу, інформаційно-аналітичне забезпечення.