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## DISCLOSURE OF BASIC CONCEPTS ON INTELLECTUAL PROPERTY ON RAILWAY TRANSPORT

The article analyzes the problem of improving the conceptual apparatus on intellectual property, including the formulation of concepts of "Ukrzaliznytsia intellectual potential," "intellectual capital of a railway", "intellectual assets of a railway", "intellectual property". The authors reveal the relationship between these concepts. The authors consider that the intellectual potential UZ is a set of intellectual resources that can be effectively used for the development of Ukrzaliznytsia sector to achieve competitiveness and innovative development of rail transport in general. Also they point out that intellectual capital of rail transport is such a part of its capital, which has no material form and consists of human and structural capital, creates cost of capital of rail transport and contributes to its competitiveness increase. The concept of "intellectual assets of railways" has been defined as a collection of intangible assets which are used by enterprises of railway transport, including intellectual property, natural and acquired intellectual abilities and skills and accumulated knowledge base and useful relationships with other entities. The definition of the concept of "intellectual property of rail transport" has been formulated as the law-enshrined right to the results of workers intellectual activity in the sector, based on the right of every employee to possess, to use and to dispose the results of his/her intellectual and creative activity that are kept on him/her and may be used by other persons only by agreement except in cases determined by law.

The widespread use of intellectual resources in which intellectual property of rail transport is the main driving force will be the basis for investment and innovation development of this industry.

**Keywords:** intellectual property, rail transport, Ukrzaliznytsia, intellectual capital, intellectual potential, intellectual assets.

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### РОЗКРИТТЯ ОСНОВНИХ ПОНЯТЬ ІНТЕЛЕКТУАЛЬНОЇ ВЛАСНОСТІ НА ЗАЛІЗНИЧНОМУ ТРАНСПОРТІ

У статті досліджуються проблеми удосконалення понятійного апарату інтелектуальної власності, зокрема сформульовано зміст понять «інтелектуальний потенціал Укрзалізниці», «інтелектуальний капітал залізниці», «інтелектуальні активи залізниці», «інтелектуальна власність» та встановлено взаємозв'язок між цими поняттями. Авторами визначено, що інтелектуальний потенціал Укрзалізниці – це сукупність інтелектуальних ресурсів, яка може бути ефективно використана Укрзалізницею для розвитку галузі, для досягнення конкурентоспроможності та інноваційного розвитку залізничного транспорту в цілому. Також встановлено, що інтелектуальний капітал залізничного транспорту – це складова його капіталу, яка не має матеріальної форми і складається з людського та структурного капіталу, створює частину вартості капіталу залізничного транспорту та сприяє підвищенню рівня його конкурентоспроможності. Визначено поняття «інтелектуальні активи залізниць» як сукупність нематеріальних активів, які використовуються підприємствами залізничного транспорту, включаючи інтелектуальну власність, природні й придбані інтелектуальні здібності й навички, а також накопичені бази знань і корисні відносини з іншими суб'єктами господарювання. Дано визначення поняттю «інтелектуальна власність залізничного транспорту» — закріплене законом право на результати інтелектуальної діяльності працівників галузі, яке базується на праві кожного працівника володіти, користуватися і розпоряджатися результатами своєї інтелектуальної, творчої діяльності, які зберігаються за ним і можуть використовуватися іншими особами лише за узгодженням, крім випадків, визначених законодавством.

Широке використання інтелектуального ресурсу, в якому інтелектуальна власність залізничного транспорту є основною рушійною силою, стане основою інвестиційно-інноваційного розвитку галузі.

**Ключові слова:** інтелектуальна власність, залізничний транспорт, Укрзалізниця, інтелектуальний капітал, інтелектуальний потенціал, інтелектуальні активи. Алина Стукало, к.э.н.

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# РАСКРЫТИЕ ОСНОВНЫХ ПОНЯТИЙ ИНТЕЛЛЕКТУАЛЬНОЙ СОБСТВЕННОСТИ НА ЖЕЛЕЗНОДОРОЖНОМ ТРАНСПОРТЕ

В статье исследуются проблемы совершенствования понятийного аппарата интеллектуальной собственности, сформулированы содержание понятий «интеллектуальный потенциал Укрзализныци», «интеллектуальный капитал железной дороги», «интеллектуальные активы железной дороги», «интеллектуальная собственность» и установлена взаимосвязь между этими понятиями. Авторами определено, что интеллектуальный потенциал Укрзализныци – это совокупность интеллектуальных ресурсов, которая может быть эффективно использована Укрзализныцей для развития отрасли, для достижения конкурентоспособности и инновационного развития железнодорожного транспорта в целом. Также установлено, что интеллектуальный капитал железнодорожного транспорта – это составляющая его капитала, которая не имеет материальной формы и состоит из человеческого и структурного капитала, создает часть стоимости капитала железнодорожного транспорта и способствует повышению уровня его конкурентоспособности. Определено понятие «интеллектуальные активы железных дорог» как совокупность нематериальных активов, используемых предприятиями железнодорожного транспорта, включая интеллектуальную собственность, природные и приобретенные интеллектуальные способности и навыки, а также накопленные базы знаний и полезные отношения с другими субъектами хозяйствования. Дано определение понятию «интеллектуальная собственность железнодорожного транспорта» — закрепленное законом право на результаты интеллектуальной деятельности работников отрасли, основанное на праве каждого работника владеть, пользоваться и распоряжаться результатами своей интеллектуальной, творческой деятельности, сохраняются за ним и могут использоваться другими лицами лишь по согласованию, кроме случаев, определенных законодательством.

Широкое использование интеллектуального ресурса, в котором интеллектуальная собственность железнодорожного транспорта является основной движущей силой, станет основой инвестиционно-инновационного развития отрасли.

**Ключевые слова:** интеллектуальная собственность, железнодорожный транспорт, Укрзализныця, интеллектуальный капитал, интеллектуальный потенциал, интеллектуальные активы.

**Problem statement.** In a market economy and under the formation of a vertically integrated management the issues of transition from an industrial economy to a knowledge-based economy are of high topicality. The basis for the creation of such an economy and a society as a whole is the introduction of innovative investment activity, dominant component of which is the intellectual resources.

Nowadays the intellectual assets of enterprises are efficient development's financial instruments that provide stabilization of business and foreign investment. Intellectual capital is the foundation for an enterprise development and for innovative products creation, since the introduction of new technologies is a key method to increase enterprises competitiveness.

Taking into consideration the current situation on rail transport, when the volumes of freight and passenger traffic have been significantly reduced, and the moral and physical outwears of fixed assets have considerably exceeded the obsolesce terms resulting in competitiveness losing and financial-economic results worsening, the issue of attracting investment to this sector have become extremely important. So far the problem of development, implementation and commercialization of intellectual property objects as a component of investment and innovation activities of rail transport becomes relevant.

Analysis of recent research and publications. Investigations on the problem of society intellectualization and economy's innovative development are reflected in the works of many scientists. In particular such famous contemporary scientists as O. Stasiuk [1], O. Kendyukhov [2], I. Mikulonok [3], V. Bazylevych [9] in their papers paid special attention to intellectual property. However, uncertainty about the content of the categories "intellectual potential of rail transport", "intellectual capital of railways", "intellectual assets of railways", "intellectual property" and reveal of the relationship between these concepts complicates the management of intellectual potential of rail transport and determines the need for further research in this direction.

The purpose of this article is to study the problem of improving the conceptual apparatus, including the content of concepts "intellectual potential of UZ", "intellectual capital of a railroad", "railroad intellectual assets", "intellectual property" and to reveal the relationship between these concepts.

The main research material presentation. Under present market relations the competitive benefits could be reached only by those industries that develop and implement promising innovation projects to their activities. Therefore, knowledge and skills of human resources are becoming increasingly important, which in the future predetermines the industry intellectual potential.

Between the concepts of "intellectual resources", "intellectual capital" and "intellectual potential" there exists an intercourse. Intellectual resources, similar to the classic definition of "resources", - means available in the individual or organization reserves in terms of knowledge, experience, links, facilities and communication networks, information technologies, that can be used as a source of income. Intellectual capital is the value typed in the manufacturing process to create additional value. We are talking about acquiring by resources the properties of a source to create a new value. Thus, intellectual capital is an economic category which characterizes qualitative state of intellectual resources of an entity as a source of a new value creation. Under intellectual potential one should mean a quantitative description of the impact of intellectual capital, or the maximum possible result of using existing intellectual capital under favorable environment conditions [4].

Let's consider these concepts in detail. There are several characteristics that are used to define the term "intellectual potential". According to the resource characteristic the

intellectual potential is regarded as a set of intellectual resources: knowledge, human abilities (groups of people), education system, computer software, communication systems, databases (libraries and electronic systems), science system.

Within the functional characteristic the researchers of the category "intellectual potential" interpret its essence in the light of the ability of economic agents to perform certain actions in order to reproduce their intellectual resources.

According to purpose characteristic in defining "intellectual potential" one focuses on the ability of intellectual resources' totality to achieve their objectives, including creating scientific, technological and managerial innovations, transferring information and others. [6].

One of the most distinctive features of intellectual potential is that it is a combination of possibilities, often not disclosed, but the really available to perform actions, including those of trading nature [5].

Having given the above information, we can conclude that the intellectual potential of UZ is a set of intellectual resources that can be effectively used by Ukrzaliznytsia to develop the sector, to achieve competitiveness and innovative development of rail transport in general. Thus, the intellectual potential of UZ is an opportunity to use the knowledge and skills of railway employees to meet the challenges facing the industry.

Considering the concept of "intellectual capital", we can distinguish three basic approaches: structural, structural-functional and terminological; they clearly reveal this concept. On the structural approach the intellectual capital is a combination of human and machine intellects. On the second approach, the structural-functional, intellectual capital is a fixed intellectual material intended for the production of more valuable property, i.e. the knowledge used to gain a competitive advantage. On the third approach this concept describes the intellectual resources of the company, with which a new value and income are created [9].

Intellectual capital is the ability to create a new value, intellectual resources of a company consisting of human and machine intelligence, as well as intellectual products produced on their own or borrowed from other sources [2].

According to the definition given in [7], the intellectual capital of rail transport is a part of its capital, which has no material form and consists of human and structural capital, creates a part of capital cost of rail transport and helps to increase its competitiveness. Thus, the bases of the intellectual capital of rail transport are knowledge, creativity and experience of railway men. The situation with the intellectual capital of rail transport has much been worsen, because the workers in the sector now have no labor motivation, the conditions for self-development have been degraded and the trends of qualified personnel flowing to other sectors of the economy have been observed. This situation can lead to decreasing the quality of work and to losing of previously accumulated intellectual potential of the industry. The main solution to this problem may be the intellectual capital retention policy on railways that should be based on the following principles: increasing employee salaries in rail industry; increasing employee motivation to self-development; improving social conditions of workers; creating a favorable moral and psychological climate in the team; enhancing the training and re-training systems [8].

British researcher E. Brooking singled out in the structure of the intellectual capital the following elements: Market Assets meaning intangible assets associated with exchange operations, determining the company's position in the market (trademarks, adherence buyers, corporate name, orders' portfolio); Intellectual Property Assets which are the law-protected intellectual property of a company (trademarks and service marks, patents, copyrights, products and trade secrets); Infrastructure Assets involving technologies, meth-

ods and processes that enable the company's work (normative culture, management philosophy, market valuation methods, financial structure, databases); Human-Centered Assets consisting of the intellectual assets used by a company (knowledge, abilities, skills and creativity of employees).

Intellectual Assets is a term used to refer to intangible objects that are identified, described and listed in the designated register of organizations. That is, it's a document-fixed intellectual capital available for employees of the organization. Thus, as an important component of intellectual capital, intellectual assets do not cover its structure [9].

Taking into consideration the above given, we can conclude that the definition "intellectual assets of railways" as a collection of intangible assets which are used by enterprises of railway transport, including intellectual property, natural and acquired intellectual abilities and skills and accumulated knowledge bases and useful relationships with other entities. In other words, the brands, clientele, corporate name, channels, licensing and other agreements and others.

In a broad sense of intellectual property means law-secured rights to the results of intellectual activity in scientific, literary, artistic and industrial areas [3]. Intellectual property as the right to the results of human mental activity is an intangible good, is stored by its creators and may be used by other persons only in agreement with them, except in cases specified in the legislation.

Intellectual property by the established tradition is divided into copyright and industrial property.

Copyright fixes with the authors and other creators of intellectual property certain rights that give them the opportunity to authorize or prohibit for a limited period of time some or other uses of their works.

Industrial property covers rights to such objects of intellectual property as patents, utility models, industrial designs, trademarks and service marks, trade names and indications of origin or appellations of origin and cease of unfair competition. Herewith the industrial property is understood in the broadest sense, and is spread not only to industry but also to agriculture, trade, to all manufactured or natural origin products.

Industrial property is inextricably linked with the economic processes of any state and is an important instrument of scientific, technical, technological and economic development of a society. The term "industrial property" is used because of its facilities are primarily assessed from the perspective of industrial relevance, cost-effectiveness, profit-gaining during their use in industrial activities.

Consequently, intellectual property of rail transport is the law-enforceable right to the results of intellectual activity of sector workers, including patents, inventions, utility models, industrial designs, innovations, trademarks, based on the right of every employee to possess, to use and to dispose the results of his/her intellectual and creative activity that being non-material are kept on him/her and may be used by other persons only by agreement except in cases determined by law.

The relationship between the concepts is given in Fig. 1.

The given relationship shows that the original source and the determining factor in the development of each railway undertaking and of the industry as a whole is the intellectual resources (assets) that cover three main components: information resources; professional and personal qualities of the employee; technologies used to obtain the result.

Successive formation, reproduction and realization of these economic categories requires proper "intellectual culture" availability, where on the top quality of intellectual

potential comes up, ways to get knowledge by personnel, their relationship with aesthetical, ethical and spiritual principles.

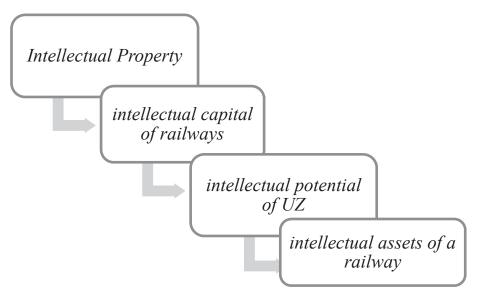


Fig. 1. Relationship between the categories of "intellectual resources", "intellectual potential", "intellectual capital" and "intellectual property" [authors' development]

Conclusions and suggestions. Having considered the categories "Ukrzaliznytsia intellectual potential," "intellectual capital of a railroad", "railroad intellectual assets", "intellectual property" and having set the relationship between them, we can conclude that the railways intellectual resources constitute a great intellectual potential, which is combined by intellectual assets of railways and is concentrated in knowledge, skills and creative abilities of railway employees. Thus, investing in them is one of the most effective tools for the sector effective management which will contribute to the economic effect meaning the creation of new technologies, reducing costs and increasing the volume of services, which ultimately will result in increased profits and improved quality of transportation services. The widespread use of intellectual resources in which intellectual property of rail transport is the main driving force will be the basis for investment and innovation development of this industry.

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