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THE INTELLECTUAL-INFORMATIONAL GOOD: VALUE AND MARKET PRICE

In this article, specifics of the intellectual-informational product are reviewed based on a system and structural method: its binary structure and specifics of the appropriation process are determined. The advantages of free licenses for authors of the intellectual products (employees) that appear in the possibility of receiving additional income from services of the intellectual-informational goods are determined. Theoretical and methodical basics of value and price formation of the intellectual-informational good are justified. The triple value-creating substance of the intellectual-informational good that represents abstract humanization, specific humanization and utility, that the consumer receives, is determined. A cost and result nature and direct connection of elements of the value-creating substance of the intellectual-informational good are determined. The forms of value of the intellectualinformational good are analyzed. A term "functional of complex valuation of the intellectual-informational good" that consists of cost function of essential efforts of the author of the intellectual product, growth function of essential efforts of the author of the intellectual product, cost function of essential efforts of producer of the storage medium and utility function of the intellectual-informational good for the customer is proposed. Recommendations for improvement of current methods of valuation of the intellectual-informational good are given.

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Introduction

Postindustrial trends of society development, scientific development, computer and telecommunications technologies, intense use of information and knowledge in production, determine the immediacy of more deep research of regularity of the intellectual-informational good market functioning.

An indisputable synthesis of theories of labor value, marginal utility, marginal productivity of factors, of costs of production, demand and supply is a necessary condition of development of the common theory of value that is capable to explain the formation of value of the intellectual-informational good. Just at the end of the XIX – the beginning of the XX century an idea of synthesis of theories of labor value and marginal utility were developing by M. Tugan-Baranovsky, V. Dmitriev, E. Slutsky, V. Voitinsky. It should be noted that in modern conditions T. Artemova, V. Afanasiev, A. Busgalin, A. Gritsenko, K. Valtuh and A. Kolganov work successfully in the mentioned direction.

The problematic of application of the theory of labor value for the valuation of the intellectual-informational good has found a reflection in studies of A. Anchishkin, M. Vodomerov, Y. Denisov, A. Diomin, R. Ziablyuk; use of the marginal utility theory with the same purpose is common for studies of such international scientists as H. Verian, G. Kazakevitch, L. Torlina, K. Shapiro. O. Antipina, V. Basilevitch, E. Bliokov, G. Getman, M. Kuznetsova, L. Melnik, R. Nizhegorodtsev, I. Rizhenkova, T. Stavtseva, A. Chuhno successfully study points of price formation of the intellectual-informational good.

Studies of foreign scientists: G. Akerlof, K. Arrow, F. Machlup, M. Porat, M. Spence, G. Stigler, J. Stiglitz and others are devoted to the current matters of production and distribution of information and knowledge, analysis of the factors influencing the price of information in different conditions.

Despite undisputable achievements of the common theory of value, lack of research of essential grounds and mechanisms of formation of value and price of the intellectual-informational good should be noted. Due to this, a necessity to rethink of definitive foundations of the formation of value of the intellectual-informational good escalates.

The goal of the article is a definition of theoretical and methodical basics of value and price formation of the intellectual-informational good. Realization of the purpose is carried out by solving the following main tasks:

- definition of the structure of the intellectual-informational good;
- definition of value essence of the intellectual-informational good;
- development of theoretical and methodical basics of value and price formation of the intellectual-informational good;
- detection of specificity of value formation of the intellectual-informational good;
- development of recommendations for improvement current methodological approaches of the intellectual-informational good valuation.

For completing tasks in research process were used such general scientific and special methods as analysis and synthesis, induction and deduction, scientific abstraction – for definition of the intellectual-informational good essence of value; systemic and structural method – for definition of the intellectual-informational good elements of value and the nature of interconnections between them, determination of specificity of their formation; institutional approach – for analysis of property rights concerning the intellectual-informational good etc.

Binary Structure of the Intellectual-Informational Product and Its Features

As an economic category, the intellectual-informational product (IIP) is a product of the intellectual activity, which is fixed on the storage medium. The intellectual-informational product destined for market exchange is the intellectual-informational good (IIG). Intellectual in content and informational in the form the intellectual-informational product represents the unity of the product of intellectual activity and the storage medium.

The intellectual-informational product is, as a rule, non-material, and therefore needs a display on one or another storage medium. If the first one is a result of primary productive activity, so the last one – primary reproductive. The productive activity (incl. intellectual) is defined by the direct humanization and the indirect objectification. The reproductive activity unlike the productive, is not innovative on the first place, and allows a repeat of already checked (processed) method to achieve a known result. It is defined by crystallization of the process of achievement of goals or by crystallization of the process of goal setting and includes direct objectification and indirect humanization.

If the main result of reproductive activity is the storage medium of the IIP, than in regards to the intellectual activity it is additional (supportive). The storage medium of the IIP is a real object where the IIP is fixed and stored; it can be hard, electronic, light-sensitive etc. By hard storage medium, one understands hard copy (paper medium) of the IIP in bookish form, in forms of pamphlets, magazines etc. The electronic mediums are magnetic and optical, magnetic and optical discs, portable data storage, magnetic tape (for example video and audio tapes) etc. Light sensitive ones are photo and video films, microforms etc. The main features of storage mediums of the IIP are homogeneity, as they are a result of mass production, exceptionality and competitiveness in consumption.

The ground of existence of the IIP as a product is a specifics of its appropriation. Whereas by its nonmaterial extract it has features of a public good, than it can be considered (determined) as an object of individual and social appropriation. Whereas the storage medium of the IIP can be an object of private property, than the real opportunity of appropriation of the intellectual-informational good (IIG) has only the one subject (business or individual). If the IIP on a certain storage medium appears on the market with a sale purpose, it obtains a commodity form – transforms into the IIG. It is inherent to it as to the IIP binary type (nature) of appropriation. That causes that on the surface of phenomena the object of purchase and sale becomes not the IIP itself, but the IIP on a storage medium, property rights to it. Falsification of the IIG is fulfilling. The property rights are determined and limited by Law, as at the same time the IIP (personal non-property right) cannot be

expropriated form its author. So on the surface of phenomena the IIG property represents human relationships that erase in the case of appropriation or expropriation property rights on it.

The splitting of property relations has led to the creation of a license market – a secondary market to the IIG market. Whereas the license defines a content of rights to the good, the IIG itself is not an object of buying and selling on a license agreements market. Let's also note a possibility of combined mode, when physical copy also becomes a good, that not rarely leads to the development of the pirate goods market.

The existence of free license that allows a consumer to partially combine rights to the good and to its copies is also a distinctive feature of the property on the IIG. The free license for the IIG allows all subjects, who joined it, to copy, to study, to modify and to use this good in any purposes (Opensource.org). The examples of free licenses for the IIG, in particular software, are BSD License, Mozilla Public License, General Public License (GNU), GNU Lesser General Public License, Apache License, MIT License.

The free license for the IIG allows subjects who joined a certain agreement to gain income from the use of this good. This license type doesn't provide license royalty to the owner. But, the last one can sell commercial licenses for this good and, therefore, gain income from it. This practice is possible on condition that the owner of the free license for the IIG use it for development the own good with a purpose of selling commercial licenses. Therefore the owner of the IIG copy on free license conditions can gain income from the sale of the IIG duplicates, commercial activity (using the IIG) and service supply of this good.

The IIG owner may use it in any purposes, give permission to other parties to its use or prohibit other parties to use this good. Therefore, the realization of use and of gaining income for the owners of the IIG copies will be varied according to the license type (table 1).

Table 1
Specifics of use and of gaining income for copies owners of the intellectual-informational good according to the license type

Subject	Commercial license	Free license
The owner of the IIG copy (author of IIP or consumer)	only has opportunity of non- commercial use of IIG copy, which does not allow to gain an income from a copy of IIG	has the opportunity of commercial and non-commercial use of IIG copy (with opportunity to gain an income from a copy of IIG)

Source: developed by the author.

Therefore, the free license for the IIG permits the author-employee of the IIG:

 To make future developments based on this IIG, such as modification and improvement of the last one.

- 2. To self-engage, to self-improve and to increase own entity powers.
- 3. To gain an income of services from this intellectual-informational good.

The author – employee of the IIG can gain additional income that he couldn't gain on conditions of commercial license, such as, the income from services of the IIG.

The Use Value and Exchange Value of the Intellectual-Informational Good

Despite that in fact expropriation and appropriation of the property rights to the IIG are taking place on the market, the IIG has use and exchange value. The use value of the IIG lays in its capability to satisfy a certain need of consumer. As it is known, all human needs can be divided in two big groups – primary needs (physiological) and secondary needs (social and spiritual). The use value of the IIG satisfies secondary (non-material) needs, as intellectual part of the product is dominant. But it becomes possible only with the availability of the document – material that fixes information on a material storage out of the author's memory. Herewith the utility of the information fixed on the storage medium is determined directly by a document – material capacity and by the user ability to understand a source and to use it for the satisfaction of his own needs (Podprugin, 2004).

If the determination of a use value of the IIG doesn't cause any discussion between scientists, this cannot be said about its value, that lays in a ground of exchange proportions. In our opinion, the main reason of the argumentative nature of the value of the IIG is a review of the last one through the prism of the certain theories of value that lead to one-sided presentation of the object, and also, to fictivization of the IIG. A cost of any product of labor is determined, from one side, as common costs for its production, from the other – as a utility that this product provides to society (Engels, 1975). To an expense side of the value relate main principles of the theory of labor value, theory of marginal productivity of factors and theory of costs of production. Principles of the marginal utility theory are showing the problems of customer behavior and his relation to the utility of goods.

In our opinion, value formation of the IIG fulfills under the influence of two components: the value of the IIG and the value of its storage medium. According to the theory of labor value a value dimension of the IIG and its storage medium should be determined by the costs of the socially necessary labor. But as on its nature, the production of the IIG has individual (single-piece) character (parallel developments are not being taken into consideration), in this conditions a concept of "middle" socially necessary labor costs per unit of output is not suitable (Anchishkin, 1987, p. 83). In its turn, a reproductive activity of the storage medium production is a necessary part of a process of materialization of the IIG. Therefore, the individual costs of a separate producer become socially necessary. The last one determines the imperfect nature of competition on the IIG market and the price of production stops being the ground of their market price.

The valuations of the economic subjects concerning utility and rarity of the IIP and its storage medium is a substance of value according to the marginal utility theory. The marginal utility of the IIG coincide with its total utility and represent utility increase for the customer from its consumption. The concept «marginal utility» of the IIP has a specificity

that appears in its singularity. It is connected to the fact that for the customer who has already had this product, the same other products lose their value (utility). The utility-based approach allows to take into consideration the results of informational-intellectual activity in the form of customer valuation. In our opinion, the important meaning for the IIP has a concept of marginal benefit from its consumption. The last one represents an additional benefit that one gain from use of this IIP. It is connected to the fact that the customer from one and the same IIP can gain benefit more than once. Unlike long term goods, the use of the IIG, as a rule, is characterized by the growth of marginal benefit with an increase of the number of customers.

In conditions when information becomes the main production factor, under its influence it is possible to set another proportion between output growth and certain resource at constant values of the number of other resources. But in this case the law of decreasing productivity acts even on the other quantitative level. For the IIG a high economy of the scale takes place: after the first unit of good was created, there are almost no limits for the quantity of copies that can be produced (volumetric capacity of a market and copying costs act as a limit).

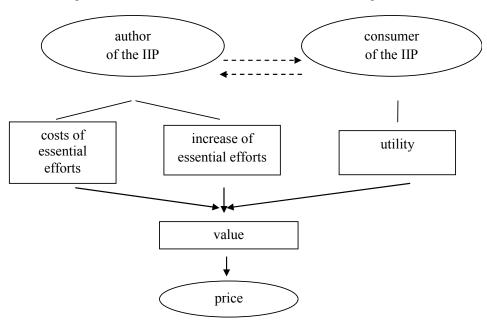
According to the theory of costs of production, the substance of value of the IIP and its storage medium are the production costs. Under the last ones understand the fixed costs – FC, variable costs – VC, average costs – AC and marginal costs – MC. Marginal costs of the storage medium production are relatively not big in comparison to the value of the fixed costs, as, improvement of technology of its copying has caused a quick decrease of production costs of the new copies. Production costs are the value dimension and the base of the storage medium price, however at the low part of the price range. There is an assumption in the microeconomic theory about the same cost functions of competing firms. It means that all the firms – producers in the same branch to maximize profit will use the same resource volumes for the production of a chosen quantity of products. But this assumption cannot be used for the branches of scientific products, that are characterized by monopolistic competition or monopoly. As the market structure of the monopolistic competition characterize, as a rule, by the production of heterogeneous products that have advantages based on the differences of a set of qualitative characteristic, using this concept it is possible to determine a price function as a function of a qualitative characteristic of the product (Kazakevich & Torlina, 2004). If to agree with this, the right one will be the conclusion that the different quality of products is determined by the different functions of costs. It is possible to assume that more unique and useful for the customer product features determine higher costs for their production. The price, in condition of the market demand, will also depend on the production costs of such product. As for the monopoly, the change of qualitative characteristic for a producer-monopolist means "competing with himself" (Kazakevich & Torlina, 2004, p. 51). So it is about the production of a new, improved product version, for which one consumer will pay a higher price.

The analysis of value of the IIP based on marginal costs showed that the theory of costs of production as well as the theory of marginal productivity of factors cannot fully explain a process of formation of value of the IIP, their cognitive ability is limited only by the process of formation of value of the storage medium. It is also right for the theory of labor value.

A Triple Substance of Value of the Intellectual-Informational Good

Therefore, for the search of the adequate theories of value and price of the IIG it is expediently to address to the common theory of value. According to the theory of positions IIP has a triple substance of value (pic. 1). The first element is an abstract humanization (costs of essential human's efforts for production of the result of the intellectual-informational activity irrelevantly to their specifics), leading place in the structure of which have expenditures of the intellectual abilities of a person. The second element – is the specific humanization, that arises as increase of essential efforts of the author. The third element of the substance of value of the IIP is the *utility* the consumer receives.

Picture 1 A triple substance of value of the intellectual-informational product



Source: developed by the author.

There is a dialectical connection between elements of a triple substance of value of the IIP, that represents unity of costs and result. Therefore, an abstract component of humanization represents knowledge, information, abilities, skills, that are spent in the process of creation of the IIP irrelevantly to its specifics. The utility has a resultant nature and is an individual attribute for each consumer. It is connected, firstly, with a limitation of cognitive capabilities of economic subjects (the hypothesis of limited rationality of H. Simon). These capabilities are a natural bound on a way of assimilation of information and acquisition of knowledge, and also use and production of the IIP. In a process of creation of the IIP an increase of essential efforts is carried out (new knowledge and information enrich human's

inner world, so and a human, that is their author makes progress and self-improve). Personal development of the author is at the same time costly and resulting element that combines costs of his essential efforts (as an abstract expense mainly for intellectual abilities), and also include a useful part as an end goal.

For the research of correlations between the elements of the substance of the value of the IIP, let's define the basic premises of the analysis. Firstly, only relevant costs of essential efforts of the author are taken into consideration; secondly, the intensity of spending of human's essential efforts, their productivity and qualification of the author are not lower than socially necessary level; thirdly, the level of technical devices that are used is not lower than socially necessary for this branch. Relevant costs include costs of essential efforts of the author for the production of the IIP, that is useful for the consumer. Irrelevant (infertile) costs of essential efforts of the author (those costs that don't lead to the IIP appearance at all or those leading to the appearance of an intellectual result that has no use for the consumer) are level off. The intensity of spending of essential efforts of the author of the IIP characterizes the amount of human's essential efforts that are being expended per time unit. The productivity of human's essential efforts is time spent for the production of one unit of the IIP. Qualification of the author is availability of training, professional knowledge, skills and experience that give him the opportunity to engage in intellectual activity. Technical equipment for creating an IIP and its subsequent fixation on the storage medium are the computer, organizational and other technics.

On the ideas of M.I. Tugan-Baranovsky of synthesis of the theories of labor value and marginal utility, correlation of expendable and resultant elements of substance of value of the IIP, it is possible to suppose hypothetically in a way of direct relation: the more are the costs of intellectual abilities of the author the more significant is the increase of essential efforts of the author and the more potential use will gain the consumer (under permanent other conditions). Lesser expenditures determine a lesser increase of human's essential efforts and accordingly lesser utility for the consumers. So, the structure of value of the IIP is characterized by the direct correlations between substantial elements of its value: costs of essential efforts of the author determine the increase of its human's essential efforts and potential utility for the consumer under permanent other conditions.

Let's consider how the change of the mentioned above conditions will influence quality correlations between the main elements of the substance of value of the IIP. Despite that some expenditures of human's essential efforts don't lead to the appearance of IIP, as itself, or don't provide the quality result for the consumer, they favor an increase of inner world of the author, besides, increase of his essential efforts. This is due to the fact that any results of intellectual activity, even not formalized, make a person, develop certain skills and abilities, influence his world view and life experience and therefore favor the increase of his essential efforts. If to the costs of human's essential efforts include also irrelevant costs this will also determine the increase of his essential efforts. In this case, the utility for the consumer of the IIP will remain unchanged and will depend directly from relevant costs of essential efforts of the author.

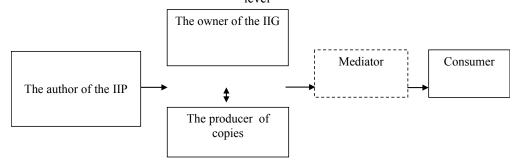
The utility of the IIP for the consumer will also increase with the increase of human's essential efforts but will remain indifferent to the influence of irrelevant costs of essential efforts of the author. So, the increase of the costs of human's essential efforts with

considering of irrelevant costs leads to the additional increase of human's essential efforts but doesn't influence the increase of the utility for the consumer. If the intensity of spending of human's essential efforts, their productivity, qualification of the author and also level of the technical equipment used for production of the IIP, won't match socially necessary conditions for this brunch, correlations between main elements of the substance of value of the IIP won't change (will be direct), though it can have positive (if the level of technical equipment used for production of the IIP will be higher than the socially necessary condition), and negative (if analogues will exist in the branch, which production costs will be lower) influence on competitiveness of the author of this IIP.

Mentioned above regarding to the value basics of the IIP, allow to move to the more detailed examine of price of the IIG. The triple substance of value of the IIP appears in relations between its author and consumer. Cooperating between themselves they implement their own economic interests. For the author – it is an increase of human's essential efforts, gaining income and compensation of his own expenditures. The economic interest of the consumer lays in the wish for maximization of the potential utility which he can receive by using IIP and/or in gaining income.

The sale of the IIG represents relations appearing between seller and buyer (consumer or mediator) of the IIG. The seller can be: the author of the IIP, owner of the IIG, and also the mediator. The sale of the IIG is an act of one-time transition of the last one on certain conditions (determined price, terms etc.). It characterizes the primary distribution of the income between parties (subjects) i.e. receiving the part of the income in the created IIP. Schemes of the interaction of subjects of value and price formation of the IIG on a surface level are provided below (pic. 2 and pic. 3). Pic.2 shows that the author transferring the IIG to the storage medium. After an act of purchase and sale the owner of the IIG can himself or with the aid of employees (direct producer of copies) replicate it. Distribution of the IIG can be carried out as with the aid of the mediator as without him.

Picture 2
The scheme of interaction of subjects of value and price formation of the IIG on a surface level



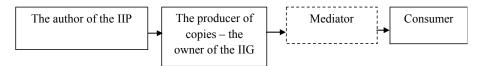
The author of the IIP, the owner of the IIG and the producer of the copies of the last one – are different persons

Source: developed by the author.

If the author of the IIP is the employee, the first exemplar of the IIG belongs to the employer (the owner of the IIG), who produces copies for the future selling (pic. 3).

Picture 3

The scheme of interaction of subjects of value and price formation of the IIG on a surface level



The owner of the IIG is a producer of its copies. Source: developed by the author.

Forms of Value of the Intellectual-Informational Good

On a surface level as a result of the sale of the IIG, its value takes different forms, including transformed, that hide the intellectual nature of the product. Among them are: the cost price of the IIG, price of production of the IIG, market price of the IIG, price of demand on the IIG, price of supply of the IIG. The cost price of the IIG is production costs of the IIP, costs of production and distribution of its storage medium (the cost price of the storage medium), costs of transition of the IIP to the storage medium and selling costs of the IIG. The price of production of the IIG is the cost of the IIG and the average for this branch (production of the IIG) profit (calculated as an average norm of profit). A market price of the IIG – is a price formed on the IIG market as a result of the relation of buyers and sellers of the IIG. It represents linking of different entities – prices of the IIP and its storage medium. A price of demand on the IIG – is a maximum price at which the buyers are willing to purchase the IIG. A minimal price at which the sellers are ready to put up the IIG for sale on the market is a price of supply of the IIG. All the above-mentioned forms arise as a result of sale of the IIG. Except for these forms, the price of the IIG can take the form of the license price.

The price of the license equals a license payment that the owner of the IIG receives as a result of their sale. It can take forms of regular (royalty), onetime (lump-sums) and mixed payments.

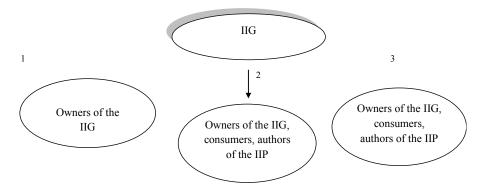
In our opinion, the owners of IIG in conditions of free licenses are aimed at gaining income from the technical support of IIG, such as education, certification, integration, etc. Besides, there is also an opportunity to gain income from the sale of commercial licenses for this product (that is already becoming the object of the private property), since the owners of the IIG have the right to "relicense" it (i.e. to sell commercial licenses). The owners of these licenses, as a rule, are software writers who based on "free" product have a purpose to create a commercial product.

Among materialistic motives of the economic activity of the owners of the IIG the main ones are the maximization of the profit from services and also from the sale of commercial licenses. Of course, there are no less important motives that induce owners to assist in the

distribution of free licenses for the IIG. Therefore, the existence of the "free" IIG stimulate demand for other products that are complements of the first ones. Consumers of the "free" IIG can follow both market and non-market motivation depending on the dominated goals of their activity: maximization of the income from services or the increase of their essential efforts. Authors of the IIP follow mainly non-market motivation.

Pic. 4 represents the scheme of the income distribution of the IIG that is the object of free and commercial licenses. Of course, there is a competition on the market for the provision of technical support services and distribution of copies of the IIG. But as the price of the copies is actually a price of a storage medium, so the competition for their distribution has no sense. Let's note that the author of the IIP (as the other consumers) can provide services as a consumer – user of the free license and also as an employee. In our opinion, he has competitive advantages over other consumers. These advantages lie in the absence of a time lag between the appearance of the IIG on the market and the opportunity to provide services of it (support, guarantees, modifications of the basic product etc.), that are determined by the fullest a priori knowledge of the product by his author, and so it is conditioned by greater quality of services he can provide to other consumers.

Picture 4
Distribution of incomes from transactions with the IIG between subjects*



^{*1 –} the income from commercial licenses for the IIG; 2 – the service income; 3 – the income from copies of the IIG. The shaded part shows a zone of commercial licenses for this IIG; not shaded part – free licenses for this IIG.

Source: developed by the author.

Valuation of the Intellectual-Informational Good from the Standpoint of the Common Theory of Value

Studying valuation methods of the IIG from the prism of the common theory of value, it becomes evident that cost-based methods don't include utility receiving by consumer and the income methods don't show costs of essential human's efforts for production of the IIP without reference to their specifics. Some extent of the essential human's efforts is

considered methods of cost-based and market-based approaches; utility for the consumer — methods of market-based and income-based approaches. The increase of the essential efforts of the author of the IIP doesn't find reflect in any of the approaches. Despite this, indirectly it can be defined based on the methodology of the cost-based and income-based approaches and also on the method of direct valuation of the parameters.

Table 2 shows the main methodical approaches of the valuation of the essential efforts of the author of the IIP. As can be seen from table 2, the disadvantages of approaches don't allow to evaluate the level of his essential efforts fully.

Table 2 Methodical approaches of valuation of the essential efforts of the author of the IIP

Approach	Content	Disadvantages of the approach, due to the nature of essential efforts
Cost-based	taking into consideration made in the past efforts directed to generation of the essential efforts of the author of the IIP	 difficulty of the allocation of the costs; unpredictability of the result; the presence of expenditures that do not have a direct monetary equivalent
Income- based	valuation of the result of the past accumulations through the output received by essential efforts of the author of the IIP	- existence of the nonmonetary benefits that cannot be measured and are not brought to a single basis - diversity of the factors influencing on the wage and labor income (including an opportunity to appropriate income by the other economic subjects)
Direct valuation of the parameters	valuation of the parameters that can be referred to the essential efforts of the author of the IIP.	Technical and methodological difficulties related to the justification of the parameters that are subjected to the accounting, development of the technology of their valuation and also bringing of the diverse indicators to a single basis.

Source: developed by the author.

As essential human's efforts are not directly subjected to the accounting, to the relevant knowledge, information, skills and abilities, economists include those which are expressed in market categories (Smirnov, 2000), although this is not the full valuation. Therefore, the method of the direct valuation relates to the nature of intellectual activity most of all, but its realization complicates by the difficulties of formation of the parameters of the essential efforts of the author of the IIP in market indicators. The cost-based approach, by contrast, least relate to the nature of the essential human's efforts, though it is partially evaluated by the market. In our opinion, the income-based approach allows to more fully show the market valuation of the essential efforts of the author of the IIP in comparison with the possible valuation of costs directed to their formation.

The increase of the essential efforts of the author of the IIP can be estimated indirectly with the aid of the explicit (resultant) and implicit (indicative) cost indicators. To the first ones relate only the indicators that have market valuation. Therefore, the level of the essential efforts of the author of the IIP can be determined with the help of the nonvisible costs or of the income from which he refuses in order to have the opportunity to create the IIP. The costs of the alternative opportunities of the author of the IIP can take form of discounted future incomes from certain types of activity that fit his qualification level. This means that

the author of the IIP can use his own potential in other, better for him way, alternative from the creation of the IIP. For example, he can hold positions that suit his professional level, receiving money reward.

Therefore the increase of essential efforts of the author of the IIP can be created on an explicit level as a change (increase) of future incomes from activity that suits his qualification. Quantitatively this can be presented as the difference between the amount of the discounted future incomes from alternative (different) types of activity of the future period and the amount of incomes that could be received engaging in alternative (different) types of activity in the current period. Implicit indicators that mediate the increase of the essential efforts of the author of the IIP – these are the indicators characterizing his personal input in the development of the certain type of activity that he carries out. Otherwise, these are the indicators of certain parameters of the essential efforts of the author of the IIP. Therefore if the author is an employee than the increase of his essential efforts can be considered as a payment of the qualification level that had increased and his professional ability in the form of the raise to the basic wage. The increase of the qualification of the employee is determined by the Tariff and Qualification Committee with the support (participation) of necessary experts by a valuation of gained knowledge and also skills and abilities that the employee perform within the certain position (profession).

The Functional of Integral Valuation of the Intellectual-Informational Good

To summarize, and based on the common theory of value let's present the functional of integral valuation of the IIG analytically:

$$F_{IIG} = F(f_1; f_2; f_3; f_4),$$
 (1)

Where F_{IIG} – the functional of the integral valuation of the IIG;

 f_1 – the function of costs of the essential efforts of the author of the IIP;

f₂- the function of increase of the essential efforts of the author of the IIP;

 f_3 - the function of costs of the essential efforts of the producer of the storage medium of the IIP;

 f_4 – the utility function of the IIG for the customer.

To the factors influencing on the valuation of costs of the essential efforts of the author of the IIP belong conditions of a simple reproduction of his workforce. The reproduction of the workforce of the author of the IIP foresees continuous restoration and support of his physical strength and mental abilities. It is necessary to study this process from the one side as a reproduction of the ability to some kind of activity (primary intellectual), from the other side as the reproduction of a cluster of features that determine this ability. The extended reproduction of the workforce of the author of the IIP is more complicated. In the basis of the low line (border) of the workforce of the author of the IIP lay more basic needs of the ordinary degree of need, mostly primary. The high line meets the satisfaction of the whole complex of physiological, social and spiritual needs, including the growth of essential efforts.

Effects of factors influencing costs of essential efforts of the author of the IIP indirectly, appear in attracting auxiliary tools for the creation of this product. Thus, the level of technical tools characterizes the economy of time for the creation of the IIP and also technical benefits of the last one. The application for the professional advice in certain fields of knowledge (theoretical and practical) means applying essential efforts of other specialists that had been spent (attracted) for the creation of this product. Conditionally to this group of factors can be attributed the purchase of property rights to the already created IIG, which are necessary for the future improvement of the existing IIP or creating of the new one.

The extended reproduction of the workforce of the author of the IIP can be extensive and intensive. Appearance, existence and development of the top needs (primary social and spiritual), the satisfaction of which provides for a higher level of development of the workforce of the author of the IIP (his essential efforts) causes reproduction of the intensive type.

It is characterized by changes in knowledge, skills and abilities of the author of the IIP (the increase of his essential efforts). Consumer expenditures of the author of the IIP within the extended reproduction can be conditionally divided on extensive and intensive. In our opinion, extensive consumer's expenditures are expenditures directed to the satisfaction of needs (mostly primary needs) that grow quantitatively with the growth of the consumption. Consumer expenditures directed to the self-development of the author of the IIP, which increase provides the quality change of his essential efforts, can be characterized as intensive. The last one characterizes the increase, mostly in the secondary needs of the author of the IIP. To identify which consumer's expenditures relate to the extensive and which ones to the intensive is possible only with the time lag because to determine if the change of the essential efforts of the author of the IIP has taken place or not is possible only in the future (next) period. For indirect factors influencing the valuation of essential efforts of the author of the IIP belong level of knowledge, skills and abilities that are changing; the existence of the realized and unrealized IIG; reputation and increasing adaptation to the market opportunities of the author of the IIP.

Conclusions and Recommendations

Main results of the research of the value essence of the IIG are the following statements:

- structure of value the IIG represents a dialectic unity of value of the intellectual product and the value of the storage medium;
- from the position of the common theory of value, the intellectual product has the triple substance of value. The first element is the abstract humanization; the second one is the specific humanization. The third element is the utility that the consumer of the product receives;
- the triple substance of value of the intellectual product has cost-result nature. The
 dialectic correlation that represents the unity of costs and the result exists between its
 elements;

• the structure of value of the intellectual product is characterized by direct relations between substantial elements: costs of essential efforts of the author of the intellectual product foresee the increase of its essential efforts and potential utility for the customer under other constant conditions.

Among the main results of the study of the process of formation of value and price of the IIG are followings:

- the price of the IIG is formed as a result of the cooperation of the owner of the IIG, mediator, the producer of the copies of the IIG and also of its consumer;
- the value of the IIG appears in the form of the price of the IIG, its cost price, prices of the demand and supply of the IIG etc.;
- imperfection of the existing methodical approaches to the valuation of the IIG, determines the necessity of development of the integral approach. In general terms, the functional of the integral valuation of the IIG may consist of following functions: function of costs of the essential efforts of the author of the intellectual product, function of increase of the essential efforts of the author of the intellectual product, function of costs of essential efforts of the producer of the storage medium and utility function of the IIG to the consumer.

Summarizing the above, in our opinion it is necessary to add to existing approaches of the valuation of the IIG (European IPR Helpdesk Fact Sheet Intellectual Property Valuation, June 2015) the following recommendations: a) within the limits of the income-based approach to take into consideration the increase of essential efforts of the author of the IIP as the change of future possible incomes from alternative activities, that meets his qualification; b) to implement a concept of the functional of the integral valuation of the IIG that depends on functions of the costs of essential efforts of the author of the IIP, of their increase, of costs of the essential efforts of the producer of the storage medium of the IIP and of utility of the IIG to the consumer; c) to complete the quality methods of the IIG by such parameters as a quality level and a level of professional mastery of the author of the IIP according to the valuation date of the IIG.

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