

# PROBLEMS OF INTELLECTUAL CAPITAL MANAGEMENT IN INOVATING DEVELOPMENT CONDITIONS

LAMARA QOQIAURI Doctor of Economics, Professor qoqiauri@yahoo.com

ᲘᲜᲢᲔᲚᲔᲥᲢᲣᲐᲚᲣᲠᲘ ᲙᲐᲞᲘᲢᲐᲚᲘᲡ ᲛᲐᲠᲗᲕᲘᲡ ᲞᲠᲝᲑᲚᲔᲛᲔᲑᲘ ᲘᲜᲝᲒᲐᲪᲘᲣᲠᲘ ᲒᲐᲜᲒᲘᲗᲐᲠᲔᲑᲘᲡ ᲞᲘᲠᲝᲑᲔᲑᲨᲘ

> ლამარა ძოძიაური ეკონომიკურ მეცნიერებათა დოქტორი, პროფესორი რეზიუმე

სამამულო მეცნიერებატევადი საწარმოების უმაღლესი და საშუალო რგოლების მენეჯერთა უმეტესობის თანამედროვე პირობებში უკვე გააზრებული აქვს სამეურნეო სუბიექტის ინტელექტუალური კაპიტალის მართვის ორგანიზაციის აუცილებლობა. ამასთან დაკავშირებით აუცილებელია განხილული იქნას მეცნიერებატევად საწარმოთა ინტელექტუალური აქტივების ჩამოყალიბების თავისებურებები და პრობლემები, ასევე შეფასებული იქნას და შეირჩეს ამ პროცესის მართვის ეფექტიანობის ამაღლების მიმართულებები. ამ სტატიაში გთავაზობთ დასმული ამოცანების გადაწყვეტას აღნიშნული სფეროს მიხედვით მმართველობითი გადაწყვეტილებების შემუშავებისა და მიღების რაკუსში. ასე, რომ მართვის პროცესი წარმოადგენს მმართველობითი გადაწყვეტილებების მიღების პროცესს წარმოშობილ პრობლემებთან მიმართებაში. განვიხილავთ როგორია ინტელექტუალური აქტივების ფორმირების და განვითარების მართვის ობიექტის და სუბიექტის თავისებურებებს, ასევე თვით მმართველობითი გადაწყვეტილებების დამახასიათებელ თავისებურებებსაც.

დღეს ინტელექტუალური საკუთრების ობიექტების პორტფელის ფორმირების პროცესის ეფექტიანი მართვა ფირმის შიდა დონეზე, მისი გამოყენება განსაკუთრებული ინსტრუმენტის უფლების სახით მეცნიერებადიტევადი პროდუქციის ბაზარზე, სამამულო საწარმოების სფეროს მნიშ-ვნელოვან სამეცნიერო-საწარმოო პრობლემად რჩება.

არსებული პრობლემური წინააღმდეგობები ბუღალტრული აღრიცხვის სფეროში, აუდიტის და ინტელექტუალური საკუთრების ღირებულებითი შეფასების სფეროში შეიძლება დაძლეულ იქნას, პირველ რიგში, საკანონმდებლო-სამართლებრივი და მეთოდური ბაზის სრულყოფის ხარჯზე. მთლიანად არამატერიალური აქტივების ყველა ობიექტის იდენტიფიკაციის და ბუღალტრულ აღრიცხვაში ასახვის სტიმულირებით; ასევე ინტელექტუალური აქტივის მართვის შიდასაფირმო სისტემის შექმნითა და სრულყოფით. აღნიშნული პრობლემების აღმოფხვრას ხელს შეუწყობს აგრეთვე ინტელექტუალური საკუთრების ობიექტების როგორც საწარმოსი ინტელექტუალური კაპიტალის მართვის სისტემის შემადგენელი ელემენტის ფორმირებისა და გამოყენების ორგანიზაციულ-ეკონომიკური მექანიზმების შემუშავება; ასევე ეფექტიანი საპატენტო პოლიტიკის შემუშავება და რეალიზაცია.



Notwithstanding important experience of western scientists, intellectual assets are conditioned by permanently changeable terms of social production in the field of economical utilization, as well as necessity of adaptation pf existed instruments and permanent improvement of processed methodological base.

If we speak about identification of intellectual capital, at the level of enterprise on the status of study of assessment and management fields, decision can be made about the fact that such studies are of quite high level. Invisibility of intellectual assets for the most part of enterprises speaks of their being unmanaged. Besides this, instability of economy and undeveloped character of market relations influence upon management process of intellectual potential for native enterprises. Mentioned condition excludes possibilities of making adequate direct western models of economical conditions.

Basic problems of managing reproduction of intellectual capital can be separated into two large classes:

- 1. Problems of formation and development of intellectual capital;
- 2. Problems of managing utilization and commercialization of intellectual property.

Let us discuss basic directions of those theoretical studies, which are related with solving separate problems of each class and define basic direction of increasing effectiveness of managing intellectual capital of knowledge-consuming enterprises.

Peculiarities of the management objects of Intellectual Capital. Most part of highest and middle ranges of native knowledge-consuming enterprises under modern conditions have already realized necessity of organizing management of intellectual capital of industrial subject. In this respect it is necessary to discuss peculiarities and problems of forming intellectual assets of knowledge-consuming enterprises, as well as to evaluate and select directions of increasing effectiveness of management of process. Author of this book offers solving raised questions pursuant to the mentioned domain from the point of processing and making managerial decisions. Thus management process is the process of making managerial decisions in relation with the raised problems. Let us discuss what are peculiarities of object and subject of management of formation and development of intellectual assets, as well as the peculiarities characteristic to managerial decisions themselves.

In the filed under study, management object is the process related with creation and development of intellectual asset. Following peculiarities of management objects can be separated here (Figure 1.):

1. Intellectual creative character of formation and development processes of intellectual assets<sup>1</sup> are expressed in the fact that their realization requires important expenses of creative energy of individual.

This is the energy which influences upon growth of effectiveness of the enterprise functioning through intellectual capital of the worker. Namely, in the competitive abilities of production (technical level, growth of its quality), as well as reduction of labor-consuming of the work and provision of resource and energy saving.

- 2. Conformity of production and utilization within the frames of the processes of forming and developing intellectual assets.<sup>2</sup> On the one hand a human goes deep into the industrial processes, while on the other hand, work at the working place means utilization of information and receiving knowledge, which are received by other people. As a result, border between entrepreneur and non-entrepreneur works, between industrial works and leisure and at last between production and utilization. Here transfer from pure production to the processes, in which important role is played by utilization tales place, as well as transfer from pure utilization to industrial activities.
- 3. Uniqueness of high quality of innovation of the results of formation and development processes of intellectual assets<sup>3</sup> is related with social-psychological peculiarities of individuals, as well as with different features of their mentality. Main direction of intellectual activity is invention, receiving unity of features characteristic to radical changes of object. Innovation guarantees unity of improved characteristics (features, data, parameters and so on), it supports growth of quality and competitiveness of the product (service), time factor, taking into account vital cycle of new commodity.
- **4. Existence of synergetic effect.** Union of intellectual potential of employees in the process of fulfillment of creative issue, is characterized with constructive synergetic effect, where

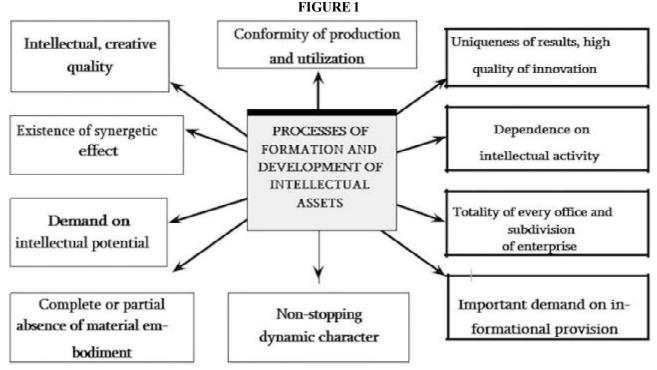
<sup>&</sup>lt;sup>1</sup> **Melnikov O.N.** Economy and Management of Entrepreneur Activities as of Function of Expenses of Creative Energy of the Subjects of Market, 2<sup>nd</sup> publishing, reviewed and annexed, M.: ID "MELAP", 2004. pg. 216; **Roos G., Dvomsspm L., Roos J., Dragonett J.** Intellectual Capital: Navigating the New Business Landscape. London Macmillan Press Ltd, 1997. pg. 117.

<sup>&</sup>lt;sup>2</sup> Lukicheva L.I., Egorichev D.N. Inter-Company Management of Intellectual Assets. M.: Omega-L, 2004. pg. 124; Larsen H.T., Vouritsen J., Bukh P.N. Intellectual Capital Statements and Knowledge Management: Measuring, Reporting and Acting. Australian Accounting Review, 1999. 9(3). Pg. 15-19.

<sup>&</sup>lt;sup>3</sup> Bromberg G.V. Intellectual Property: from Creation to Utilization. M.: INITS Rospatent, 2002. pg. 207.

<sup>&</sup>lt;sup>4</sup> Ruus I. Paik S., Feristrem L. Intellectual Capital: Management Practice. Translated from English language. St. Petersburg. Supreme school of management, 2008. pg. 17.





Synergetic effect can be destructive as well in case of corporative culture and negative influence of technologies, its intellectual surrounding, and psychological inconformity between the participants of information creative group.

Potential 2

Personal Intellectual - Personal intellectual

Potential 1

- **5. Demand of intellectual potential.** Intellectual property of employees, as reserve of knowledge, experience and creative abilities (expressed in the way of means of free production in the process of formation and development of intellectual activity). Thus effectiveness of intellectual activities, in the first place, depends on intellectual potential of employees.
- 6. Complete or partial absence of material realization of the processes of formation and development of intellectual assets<sup>6</sup> is related with the fact that functioning of the brain is invisible to the eye; creative process has endogen character, as well as result made in the process of transferring to material carriers; though this material carrier looses its importance standing apart.
  - 7. Dynamic, unstoppable character of the pro-

cesses of formation and development of intellectual assets.<sup>7</sup> Dynamic character is expressed in the fact that the employee doesn't stop realization of creative objective together with completion of working day. It continuously thinks about this objective and tries to find the way of its solving. This process is unstoppable and includes total space in the lives of the persons and enterprise. Besides this, receiving creative results automatically gives rise to its dialectic development. That is why the process of creation of the new has continuous, permanently developed character.

- 8. Important demand on informed provision.8 Discussed processes demand utilization of the flow of entering resources. In creative intellectual works existed knowledge, data and information are used in the way of resources. Additional intellectual product is received in the process of processing abovementioned resources, as a result of wasted energy. This latest together with respective informational provision requires high creative work.
- **9.** Consistence of every office and subdivision of enterprise. For today creative work consists of every office and division of enterprise; namely, technical department, which provide realization of scientific-research

2 Personal intellectual

Potential.

<sup>&</sup>lt;sup>5</sup> Bruking E. Intellectual Capital: Key to the Success in New Millenium. St. Petersburg: Piter, 2001. pg. 288.

<sup>&</sup>lt;sup>6</sup> Ruus I. Paik S., Feristrem L. Intellectual Capital: Management Practice. Translated from English language. St. Petersburg. Supreme school of management, 2008. pg. 17.

<sup>&</sup>lt;sup>7</sup> **Teece David J**, Managing Intellectual Capital: Organizational, Strategic and Policy Dimensions. Oxford University Press. 2000. pg. 300.

<sup>&</sup>lt;sup>8</sup> **Sargadov A.** Human Capital: Source of Development // Economika I zhizn. 1998. No. 1-2 extract / **V.V. Glukhov, B. Korobko, T.V. Marinina**. Economy of Knowledge St. Petersburg, Piter, 2003. pg. 528.

<sup>&</sup>lt;sup>9</sup> Teece David J, Managing Intellectual Capital: Organizational, Strategic and Policy Dimensions. Oxford University Press. 2000. pg. 300.



and experimental-constructional works, marketing, financial, staff and other offices of management. This is related with continuous process of creation of scientific, technical-technological ideas, study of markets and technologies of analyzes, marketing instruments, procedures of managing financial flows, methodologies of financial analyses, technologies stimulating development of employees, methods and instruments of management, obtaining and processing information and technology of analyze and so on. Thus, increasing effectiveness of the work is achieved by means of involving of every office of the enterprise into production of intellectual capital, which brings to the enterprise significant financial and social effects.

10. Dependence on intellectual activity.<sup>10</sup> Results of formation and development processes of intellectual assets depends greatly not only intellectual potential of a person, but on its intellectual creative activity. This is the process of intellectual activity when transformation of intellectual potential and its information into additional intellectual product takes place.

Management subject of formation and development of intellectual assets are managers of every office and subdivision of the enterprise, as well as employees of marketing, patent, HR departments, workers of management departments of intellectual property and intellectual assets (at foreign enterprises), also superior management. Peculiarities of management subjects are: high qualification, economical and legal education, essence of management object and good knowledge of specification. Besides this, the ability of working without permanent control of higher management in new fields of ideas, science and technique is of great importance as well. One of the most important factors of successful work is personal abilities of a man: innovative aspects and initiative.

In the process of managing field of formation and development of intellectual assets, following decisions are made:

- about formation of informational intellectual surrounding;
- about definition of processing and directions of programs of creation of intellectual assets;
- about definition of demand on intellectual resources;
  - about utilization of funds of knowledge;
- about increasing productiveness of intellectual labor;

- about development of inclination towards leadership and creative labor;
- about formalization and segmentation of procedures for coordination of every specialist involved in management of formation and development of intellectual assets;
- about determination of rights and responsibilities of employees (which influence upon creation and development of information – intellectual property of the enterprise);
- about formation of system of methodologies and methods of gathering, transferring, processing, maintenance and utilization of information;
- on provision of information security and processing activities of reduce availability on it;
  - of provision of external environment monitoring;
- on preventing leakage of commercial information to external environment;
  - about organization of legal security;
  - on avoiding unfair competitiveness;
- about conducting analyze and evaluation of commercial price of created intellectual assets;
- on attraction of intellectual potential from external enterprises;
- on development of intellectual potential of enterprise through verifying purposefulness of investments of financial resources.

# Peculiarities of making decision about management of formation and development of intellectual assets include in the fact that:

- it significantly depends on analyzing situation at the market, by taking into account tendency of request on their processing;
- according to the specifics of goods it is characterized with high demand on knowledge of legal and juridical basis of mutual relation with partners;
- they support intellectualization of labor activity; and increasing level of their knowledge consuming;
- it subordinates to hardly to standardization, as problems to be solves are not similar and standard;
- accent is made on changes in the composition of goods and service to be provided, improvement of their quality, as well as development and satisfaction of increasing demand on society and individuals;
  - Has high degree of indefiniteness and risk;
- ♦ They influence greatly upon development and effectiveness of functioning;<sup>11</sup>

<sup>&</sup>lt;sup>10</sup> **Melnikov O.N**. Management of Intellectual-Creative Resources of Knowledge Consuming Enterprises. M.: Machine Industry, 2004, pg. 324.

<sup>&</sup>lt;sup>11</sup> **Bromberg G.V**. Intellectual Property: from Creation to Utilization. M.: INITS Rospatent, 2002. pg. 207; **Bruking E.** Intellectual Capital: Key to Success in New Millennium. St. Petersburg: Piter, 2001. og. 288; **Sveiby K.E.** Intellectual Capital and Knowledge Management, 1998; **Teece Davud J**. Managing Intellectual Capital: Organizational, Strategic and Policy Dimensions. Oxford University Prss. 2000. pg. 300.



- Economical balance is ruined, enters oppositions and indefiniteness in dynamic development of economy:
  - Are used at every level of management;
- Requests utilization of respective methodological provision, namely utilization of he method of defining individual bit in the process of formation and development of intellectual asset in definition of commercial cost of created intellectual products., also in monitoring of management of creation and development of intellectual assets of monitoring upon activation of monitoring activities.

Let us form the factors of forming and development of intellectual assets influencing upon management domain:

Thus work of the managers in the way of management of commercialization of intellectual assets has creative and intellectual character, while making managerial decisions is directed towards firm innovative development of enterprise, which is one of the basic term for rising competitive abilities of enterprise.

Basic problems of managing Intellectual Assets. Management of intellectual capital is considered to be insufficiently processed direction in economical science. In this respect practical work from the point of management of formation and development of intellectual assets become difficult by means of existence of numbers of problems. <sup>12</sup> We can separate problems about intellectual assets by means of analyze of theoretical and methodological base of research into three groups:

- 1. Problems of planning and organization of processes of formation and development of intellectual assets;
- 2. Problems of control and effectiveness of the process of formation and development of intellectual assets:
- 3. Problems of motivation of workers in the process of formation and development of intellectual assets;

In the Figure 1.8 we represent complex of problems existed in the field of managing formation and development of intellectual assets. Let us discuss these problems in more details.

## 1. Absence of total concept of intellectual capital.

During last decade many works have appeared about the essence and structure of intellectual capital. Diversity of opinions of scientific-researchers defining intellectual capital has given us opportunity for stating extremely interesting fact. Namely, similar formulation of mentioned problem has not formed till today. As we have said above, the researchers use diverse, though contextually identical terms of description of intellectual capital. Mentioned condition sometimes gives rise to exclusion of these terms from the context.

Among widely spread methods of approach defining unity of intellectual capital, as intellectual assets, following can be separated:<sup>13</sup>

- knowledge, which can be converted into profit;
- ◆ Collective intellect of every employee of the company;
- Unity of scientific and united knowledge of employees, communicative channels of experience, organizational culture, image and information systems;
- Unity of information-intellectual resources and products.

Absence of common opinion about definition of intellectual capital makes the process of managing formation and development of intellectual capital difficult.

- 2. Complexity of processing inter-company structure of intellectual assets. Under modern conditions, most part of knowledge-consuming enterprises appears itself under mentioned problems. Namely, in various fields of industrial work at the same time form, develop and utilize various kinds of intellectual assets, such as: scientific ideas, technical-technological proposals, marketing technologies, financial instruments, managerial know-how and so on. In this respect structuring and classification of the kinds of intellectual assets is quite difficult, though necessary objective, and it must be solved in the process of managing formation and development of intellectual assets;
- **3.** Complexity of distribution of functions and responsibility of contractors. This problem is related with theoretical non-processing of the field of intellectual assets. There is no common opinion about goals, objectives and functions of management of intellectual capital. Respectively, knowledge about organization of management system of intellectual assets in practice, also necessity of changing organizational structure, as well as establishment of new department or distribution of new obligations among working specialist.
  - 4. Absence of instruments of effective distribu-

<sup>&</sup>lt;sup>12</sup> **Kesan Jay P.** Agricultural Biotechnology and Intellectual Property: Seeds of Change. Cambridge, Mass: CABI, 2007; **Christopher May.** The World Intellectual Property Organization. Abingdon. Oxon; Routledge, 2007; **Lukicheva L.I., Egorichev D.K.** Management of Intellectual Assets. Scientific-Practical Aspect. M., 2004 and so on.

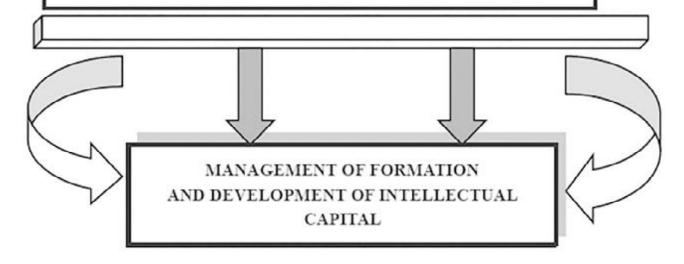
<sup>&</sup>lt;sup>13</sup> **Sveiby K.E.** Intellectual capital and knowledge management, 1998. pg. 85; **Teece David J.** Managing Intellectual Capital: Organizational, Strategic and Policy Dimensions. Oxford University Press, 2000. pg. 300; **Brooking E.** Intellectual Capital: Key to Success in New Millennium, 2001. pg. 288; **Bromberg G.V.** Intellectual Property: from Creation till Utilization. i.: INITS Rospatent, 2002. pg. 207.



# FIGURE 2. FACTORS INFLUENCING UPON MANAGEMENT OF FORMATION AND DEVELOPMENT OF INTELLECTUAL CAPITAL

### FACTORS

- Political-legal surrounding;
- Ecological status;
- Sphere of practice;
- · Organization-legal form of enterprise;
- · Selected strategy of enterprise;
- Mutual-relation with partners;
- · Capacity of existed and potential markets;
- Image of the enterprise;
- Existence of communicative relations with external organizations;
- · Business activity of enterprise;
- · Financial-economical factors (existence of sources of financing);
- Organization-methodological provision of management, including the level of developing methodological provision of index of intellectual asset value rating, as well as with effectiveness of their creation and utilization:
- · Patent pureness of intellectual product;
- Information factors (existence of special software, level of organization of inter-company exchange);
- Factors of human resources (intellectual potential of human resources, emotional-psychological conformity of participants of work-groups);
- Industrial-economical factors (domain of production nomenclature, volume of its production);
- The level of knowledge-consuming of product, its complexity and so on.





tion by creative work. Mentioned problem is related with the fact that knowledge-consuming enterprises have quite reduced information about intellectual abilities of own employees. In this regard, distribution of working force by products and objectives are realized chaotically, intuitively. Psychological conformity of workers united in the working groups is not foreseen as well, this essentially reduces effectiveness of creative work.

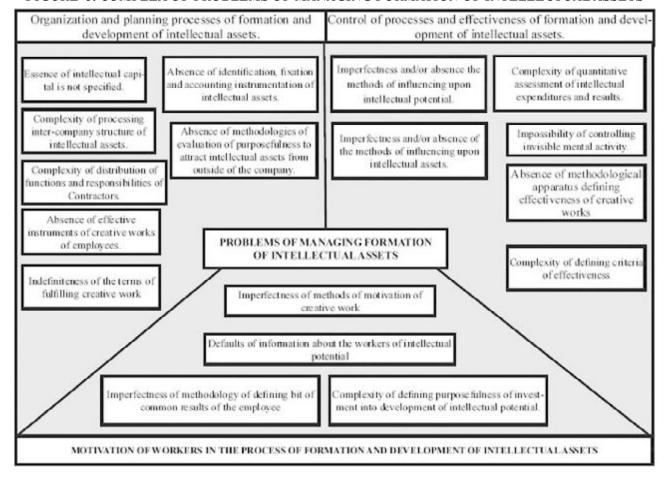
- 5. Indefiniteness of the terms of fulfillment of creative work.<sup>14</sup> Differing from material production, which can be successfully planned, production in intellectual product is not always subject to purposeful planning. Though, western companies find way out of this situation: for this purpose they reduce innovative cycle (including terms of fulfillment of scientific-research and scientific-constructional works). We can conclude that the instruments of planning creative works still exist and planning is realized directly.
- **6. Absence of instruments of accounting fixation of identification of intellectual assets.** It is quite difficult to fix every idea formed in practice. It is especially difficult to separate innovation of true commercial

value among them. Besides this it is necessary for managers to make opportune decision about the moment, forms and purposefulness of legal defense of intellectual assets. Each such objective conditions necessity of creation and development of special information systems and communication channels, which would support not only accumulation of knowledge, but also its processing and distribution to the necessary subject, on time and in respective quantity.

The problems of accounting intellectual assets, including financial, taxation, accounting and managerial ones are also of great importance. This is related with the fact that immaterial assets appear to be one of the most principally new objects of accounting. That is why the issues of such accounting are one of the most difficult problems in the theory of accounting.

Under modern conditions practical work of accountants in this respect becomes difficult because of some factors: principal non-processing if separate issues of methodology of accounting; this latest is conditioned by absence of concept of legal forms and economical content; sometimes elementary inconformity of various nor-

FIGURE 3. COMPLEX OF PROBLEMS OF MANAGING FORMATION OF INTELLECTUAL ASSETS



<sup>&</sup>lt;sup>14</sup> Brooking E. Intellectual Capital: Key to Success in New Millennium, 2001. pg. 288.



mative acts, including contradiction takes place.

To our mind, reasons of problems named above are absence of regulated legal base of accounting of immaterial assets, as well as technologies of its realization. It is remarkable that the problem of intellectual capital accounting moved to one of the first position.

Because of the above mentioned conditions scientific studies were activated, new publications and works to solve mentioned domain have appeared.

Let us discuss above problematic fields in more details.

- 1. Uncertainty of legal essence of objects of intellectual property. Involving objects of intellectual property into immaterial assets of enterprise gives the enterprise opportunity for receiving important incomes to the enterprises; though the category of "invisible" assets is difficult to understand. The condition that the accountants do not need (and do not know) solving the issues of accounting of including in immaterial assets of intellectual property, gives rise to large number of mistakes and defaults in accounting, and this, in its turn, increases financial losses of enterprises. Classification of the objects of intellectual property is represented in the Figure 1.9.
- 2. Discussion degree of the issues of depreciation of the objects of intellectual property. Pursuant to the resolution of accounting "cost of immaterial assets is covered with depreciation, if not otherwise defined by mentioned resolution". They do not foresee in the Resolution existence of those immaterial assets, cost of which is not covered through depreciation. As for the objects, pursuant to which value is paid, immaterial assets transfer their initial value (on the monthly basis) to the production expenses or turnover expenditures. The companies define norms with the terms stated from the time of their utilization. For those immaterial assets, on regard to which it is impossible to define useful term of utilization, norms of the cost of transfer are stated in calculation for 10 years (though not more than the term of functioning of the company). Depreciation of immaterial assets is foreseen separately in the accounting.

It must be mentioned that in the western countries the list of depreciated objects of immaterial degree and the terms of covering their value remain under discussion. The issues are raised in following way: will every immaterial asset be depreciated or not, and if not, which asset doesn't transfer its cost on newly created production. Pursuant to the resolution of accounting, immaterial assets are not separated into depreciated and non-depreciated assets.

Thus, in practice, the issue of depreciation of immaterial assets is related with numbers of problems and remains to be disputable issue in accounting.

3. Difficulty of defining term of using intellectual property effectively. Determining term of effective utilization of depreciated immaterial assets and determining norms of their depreciation is realized in accordance with one of the three options.

In case of the first option term of effective utilization conforms to the term of immaterial assets of various kind (right of use, patents and so on), which is foreseen in respective agreement. Upon using second option, the enterprise independently determines term of effective using of immaterial assets (though not less than one year). Solving this issue influences upon size of initial value of the object of immaterial assets, as well as changing cost of specific enterprise. During the third option, it is practically impossible to determine term of effective using. In such case law in force foresees ten years, i.e. annual norm of depreciation charges will be 10%.

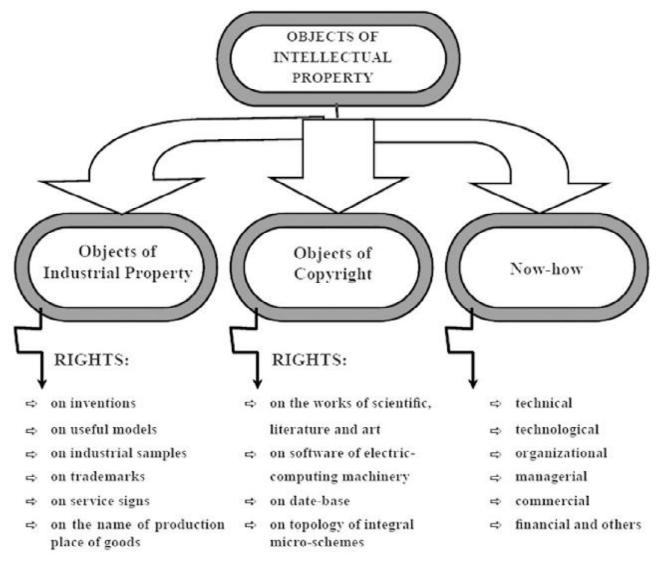
Thus, term of effective usage of immaterial assets and norm of depreciation is defined on the basis of trustful information about every object of accounting, by taking into account their specific character. This is related with specific difficulties under the terms of diversity of the forms of objects of immaterial degree.

- 4. Existence of the objects of unregistered intellectual property. Existence of unregistered immaterial assets within that of the enterprise is conditioned by lack of knowing of normative-legislative base in the field immaterial assets (unreasonable hiding and reasonable hiding). It is not convenient for the enterprise to display unregistered immaterial assets and their registration in the balance, as it will give rise to the growth of the price of enterprise assets and respectively, growth of taxation base according to the numbers of taxation. Though, it must be mentioned that according to the accounting unregistered objects (or those which remain beyond accounting), they will not be able to participate in industrial activity, as essentially they are not under their property.
- 5. Difficulty of selecting the forms of involving objects of intellectual property into the enterprise. Basic rules of entering immaterial assets into the enterprise are given in the Figure 5.

Under modern conditions there is no unified terminology, which could take into account every option of the rules of involving this or that asset into the balance of the enterprise. For example, the process of purchasing immaterial assets, in its wide meaning, can be considered as the process of granting the enterprises special right, notwithstanding legal basis (license, foundation agreement, and agreement about transferring knowhow and so on). In its small meaning, this is the process of receiving reimbursable assets or rights.



### FIGURE 4. CLASSIFICATION OF THE OBJECTS OF INTELLECTUAL PROPERTY



From the point of this material including assets into the balance is considered to be the process of purchasing gifted property of immaterial assets.

Purchasing objects of special rights created by other organizations and persons of the enterprise can be realized on the basis of civil legal agreements: license – authors' agreements on using the production, agreements on transferring know-how. Since nineties till today purchasing and creation of immaterial assets are realized by means of long-term investments of the company.

In the provisions of accounting they must foresee not only purchasing of immaterial assets, but also their creation. It is necessary to take into account conditions that creation – this is initial state of the property right on the subject; and in relation with immaterial assets property right is not created; we deal not only with property right, but also with creation of special property rights on the object.

For this reason it would be correct to say not pre-

paring immaterial assets but purchasing immaterial assets.

Creation of immaterial assets is possible as with own forces of the company, so in the way of attracting external organizations. Legal registration of creating creative works is necessary to clarify the issue of ownership of the right of using created work and in this respect property right of the enterprise and the author. For legal registration of creation and transfer of creative works following can be used: agreement on creation and transfer of the author's work, fulfillment of scientific-research and experimental-constructional works, and creation and transfer of scientific-technical products.

When speaking about immaterial assets, we must pay attention to the conditions that putting margins between creation and purchasing of immaterial assets is extremely difficult, as creation of immaterial assets on the basis of the agreement considers its further transfer to the Customer.

### **ᲘᲜᲕᲔᲡᲢᲘᲪᲘᲔᲑᲘ ᲓᲐ ᲘᲜᲝᲕᲐᲪᲘᲔᲑᲘ**



Thus, there is necessity of terminological reasoning of the object of accounting. The process of unifying terms of accounting has independent meaning. Its special importance under modern conditions is conditioned by the fact that many accounting terms are used in tax law and, respectively, ambiguity and untreated nature of these issues which can bring serious tax results for the enterprise.

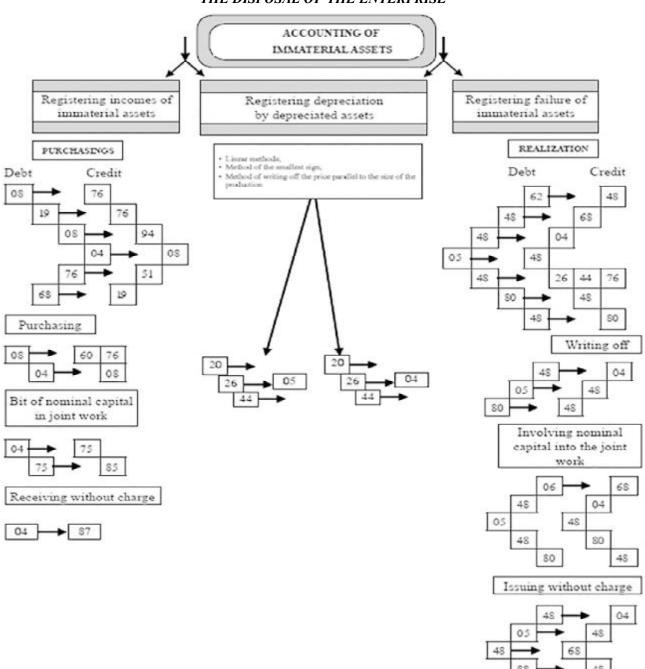
Foundation to reflecting immaterial assets of includ-

ed in the nominal capital of the accounting of enterprise is establishment agreement. Immaterial assets are reflected in the value rating agreed with the founders.

Immaterial assets can be entered into the enterprise without free of charge. Herewith, receiving material valuables (units) free of charge is realized on the basis of the deed of gift, which is prohibited to be signed by commercial organizations.

Immaterial assets of special rights of the company

FIGURE 5. METHODS OF BRINGING IMMATERIAL ASSETS UNDER THE DISPOSAL OF THE ENTERPRISE





can not be alienated on the basis of the deed of gift. Their transfer free of charge can be registered with the help of above abovementioned agreements, in which there is no conditions about alienation of these object charge free; i.e. condition about price. Herewith, immaterial assets can enter the enterprises cost-free as from individuals, so – legal entities.

6. Complexity of defining cost index of the object of intellectual property. Indexes of cost of the objects of intellectual property are given in the Figure 6.

Every given data can be detailed in direction of the articles of expenses and calculation. According to the direction of expenses, as a rule, material expenses are separated, as well as costs on labor reimbursement, transfers for social need, depreciation of principal funds and so on.

Besides this fact, directions of expenses can be defined in accordance with cooperation of enterprise, structure of sample and other foundations. According to the articles of calculation of detailing value data, their list and context of expenditures, which are involved in this or that articles, shall conform to the fixed and active legislative rule.

It is to be mentioned that the system of cost indexes according to the specific kinds of the object of intellectual property, it may consist of each named indexes or some of them.

Besides this, some additional indexes can be involved into them, for example, the value of registration of the object of intellectual capital, norm of profit and son on. Complexity of defining mentioned value indexes is conditioned by the necessity of detailing expenses, difficulty of their calculation, absence of information needed at separate stages or incomplete information, with predictive character of the most part of indexes.

7. Refusing conducting audit of immaterial assets or their non-regular conduct. Specification of the work of knowledge-consuming enterprises, which create and use intellectual assets of various types in the process of their work, conditions necessity of conducting their audit regularly.

Given facts give opportunity to make conclusion that improvement of political-legislative and normative policy in necessary, as well as organization and provision of managerial registration of intellectual assets within specific enterprise.

8. Absence of absence of purposefulness of at-

tracting intellectual assets from outside. As we have already mentioned, within modern conditions growth of not only the markets of intellectual property and intellectual products is taking place, but also those of accompanying services (including consulting ones). For successful development of native production it is necessary to organize optimally formation and management of intellectual assets, realization of which can be provided in case of obtaining information about such service and assessment of purposefulness of such collaboration.

9. Complexity of qualitative assessment of intellectual expenditures and outcomes. Many well-known scientists and specialists are involved in solving this problem under modern conditions. Monitor of Sveiby, 15 as well as P. Strasman's conception of evaluating intellectual capital on the basis of information productiveness can be examples of attempts of qualitative evaluation of intellectual capital, 16 T. Steward's methodology of evaluation complete price of immaterial assets, 17 A. Pulic's technology of evaluating the value of additional intellectual capital (VAICTM). 18

Named methods of approach are of great interest, though we consider it to be necessary to process joint conceptual approach, which makes it possible to take into account not only total cost of intellectual capital, but also the value of its components and intellectual work.

- **10.** Impossibility of controlling invisible mental work (activity). As intellectual work is controlled directly by an individual, the control, at its traditional meaning is quite ungrounded; i.e. different method of approach towards control of providing creative work is necessary.
- 11. Absence of methodological apparatus of defining effectiveness of creative work. This is quite difficult problem, as in the process of control inclination of actual index from planned indexes shall be displayed, as well as correction of activities to provide effective work.<sup>19</sup> In case of intellectual work, which, as we have already said, is difficult to be quantitatively measured and effectively evaluated.
- 12. Complexity of defining criteria of effectiveness of creative work. Mentioned problems are in close relation with above discussed problems. Truly, for creative work it is very difficult to define criteria of effectiveness for creative work, as they are carriers of not only economical, but if diverse effect. Under modern

<sup>&</sup>lt;sup>15</sup> Sveiby K.E. Intellectual Capital and Knowledge Management, 1998. pg. 121.

<sup>&</sup>lt;sup>16</sup> **Sullivan Patrick H.** Value-driven Intellectual Capital. How to Convert Intangible Corporate Assets into Market Value. John Willey & Sons, Inc, 2000. pg. 562.

<sup>&</sup>lt;sup>17</sup> **Stewart T.** Intellectual Capital: The New Wealth Organisations. Doubleday. New Yourk. pg. 44-45.

<sup>&</sup>lt;sup>18</sup> Pulic A. An Accounting Tool for IC Management. http://www.measuring-ip.at/Papers/ham99txt.htm

<sup>&</sup>lt;sup>19</sup> Sullivan Patrick H. Value-driven Intellectual Capital. How to convert intangible corporate assets into market value. John Willey & Sons, Inc, 2000. pg. 562.



### FIGURE 6. BASIC COST INDEXES OF THE OBJECTS OF INTELLECTUAL PROPERTY

1. VALUES. Kinds of prices are defined with foreseeing classification given above for specific objects and conditions. By taking into account methods and peculiarities of calculation, the values of scientific-technical and serial production are relatively characteristic. According to them they define the values of preparing object of intellectual property, as well as limited and expected values on scientific-technical production.

### THE VALUE OF PROCESSING OBJECTS OF INTEL-LECTUAL PROPERTY.

(The value) including scientific-experimental works, the value of processing experimental-constructional works, in-

cluding exclusive and technical projects, also those of preparing experimental samples (experimental party), processing technical documentation, testing experimental samples. Correction of technical documentation by test results. Besides this, into the system of value indexes of processing intellectual property can additionally include separate elements, which conform to the nature and peculiarities of provided works. For example, the value of processing special software for electric-computing machines.

### THE VALUE OF PREPARING OBJECTS OF INTELLEC-TUAL PROPERTY.

(The value), including that of preparing production (value). Cost (value) of the object to create conditions to master produc-

tion and manufacture of planned party for conditions of initial production of the object.

4. THE VALUE OF CAPITAL-BUILDING.

From the point of objective assembling of intellectual property.

 COST OF EXPLOITATION OBJECT OF THE OBJECT OF INTELLECTUAL CAPITAL ON SPECIFIC PERIOD OF TIME.

THE VALUE OF UTILIZATION OF THE OBJECT OF INTELLECTUAL CAPITAL.

 THE VALUE OF REALIZATION OF DISTRIBUTING THE OBJECTS OF INTELLECTUAL PROP-ERTY WITH THE RIGHT OF COPYRIGHT.

conditions the enterprises shall foresee effects of all kinds, including social and ecological ones.

13. Incompleteness of the methods of influencing upon intellectual potential and methods of intellectual activity. As it is known, realization of several managerial influences to increase effectiveness activities means making corrections. According to this, the issue of influencing upon intellectual potential and intellectual activity becomes of initial importance. Today in-

struments are evident to be of insufficient number. New instruments are needed, including utilization of different mechanisms of motivation.

**14. Incompleteness of methods of motivation of creative work.** This issue is being actively discussed in the field of study of intellectual capital, though opinions of authors of these works are similar in the way of searching new methods of defining specifics of creative work and efficiency.<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> Brooking E. Intellectual Capital: Key to Success in New Millennium. St. Petersburg.: Peter, 2001. pg. 288; Lukicheva L.I. Management of Personnel. i.: MIET, 2000. pg. 116; Rubinshtain Moshe F., Firstenberg Iris R. Intellectual Organization. Bringing Future to Present and Turning Creative Idea into Business Decision. Translation from English. M.: INFRA-M, 2007. pg. 192; Cristopher May. The World Intellectual Property Organization: resurgence and the development agenda. Abinggon, Oxon; Routledge, 2007. pg. 114; Yo Takagi, Larry Allman, Mpazi A. Sinjela. Teaching of intellectual property. Cambridge: Cambridge University Press, 2008. pg. 15; Scott Kieff, Palph Nack. International United Stales, and European Intellectual property. New York. Aspen Publishers, 2006. pg. 87.



15. Insufficiency of information about intellectual potential of employees. Under modern conditions, when knowledge and creative energy become basic source of the value, knowledge-consuming enterprises are to create base of knowledge about intellectual potential of workers. To solve this problem psychologists and sociologists are to be invited, which shall process maps and tariffs of evaluation. Specialist will be evaluated on such basis. Thus, the object of attention of modern economy is a person with specific abilities, as individuals. This latest transforms his talent and ability into the ability and then into financial result within the bounds of the enterprise.

16. Imperfectness of methodology of defining bit of workers in total outcome. Notwithstanding the fact that the problem of defining bit of specific specialist generally is one of central issues in the process of managing formation and development of intellectual assets, it still remains to be unsolved problem. It requires conceptual method of approach towards intellectual assets.

17. Complexity of defining purposefulness of investment into development of intellectual potential. In regard to the fact that investments into intellectual potential are characterized with great definiteness and significant effectiveness, the issue of defining purposefulness of such investments are extremely actual for modern enterprises.

Algorithms of Value Rating of Intellectual Capital. Commercialization of intellectual capital generally means making income on the basis of including elements of intellectual capital into the industrial turnover, as inside, so outside enterprise.

Making profit from including results of intellectual activities into the complex of non-current assets of the enterprise can be explained by following reasons:

- 1. Value rating of scientific-technical potential and specification of its possibilities in the competition of knowledge-consuming products at the commodity market is provided upon utilization of immaterial assets.
- 2. Existence of immaterial assets within the structure of non-current ones can essentially influence upon the size of tax payments into the budgets of various levels. Growth of depreciation charges can give rise to the growth of the value of knowledge-consuming production and reduce base of taxation base in respect of profit tax. Herewith, the enterprise can be released from Value Added Tax if the transaction is registered as patent-license agreement or the agreement on issuing copyright.
- **3.** Growth of the value of goods transferred to the market cab essentially change competitive surrounding at the commodity market and support formation of the market sector, which will be in the first place oriented

towards the consumers of purchasing expensive technique. In fact, involving immaterial assets into the complex of immaterial assets can stimulate creation of new sectors of commodity market and formation of new financial strategy.

- 4. Inclusion of immaterial assets into the complex of non-current ones can give rise to the activation of the process of attracting investments. In such case immaterial assets become the system of guarantee and insurance of investments. This moment can be essentially strengthened, if patents and patent portfolios will play the role of the objects of immaterial assets. These are patents to be the subject of mortgage in the process of attracting investments.
- 5. Inclusion of immaterial assets into the complex of non-current assets makes it possible to increase general assets of the enterprise and at the same time support growth of prestige of this latest, increasing degree of trust towards production of knowledge-consuming production from the consumers' side that, in its turn, support making additional income.

6. Immaterial assets of completely defined value can be used upon signing agreement on sale and purchase (assigning) of the property right, upon forming nominal capital, upon creation of the objects of intellectual property, as well as its insurance, alienation or gifting free of charge, upon transaction on inheritance or others, related with total or partial alteration of active enterprises or their owners (package of shares or its part). This latest, in its turn, plays the role of the factor of increasing its profitability and rising effectiveness of the work of enterprise.

Upon discussion of commercial issues of using results of intellectual works under the conditions market economy understanding important aspects of intellectual property and the problems of value rating gain special importance.

It must be mentioned that in economically developed countries, where market relations were formed historically earlier, formation of practice of evaluation of the objects of inventions and other intellectual capital and their building on market principals. In the countries, where not in the far past such objects were properties of state and in the courtiers, where it is not long since national industry has been formed and the country moved to the global market, – practice of evaluation of intellectual property has met with specific difficulties.

One group of problems is related with the deficit of methodological literature and methodological processing (according to the old assessment in the west, the company needs no manuals, as it has experience of its workers; new worker learns the work through specific methods, on the base of solid economical education on



their work place).

Second group of problems is related with the diversity of real social-economical conditions of the countries, which have transitive and developed economical systems comparing with the developed countries. Pursuant to any parameter, beginning with scientific traditions and law and finished with the level of transactions and availability of information.

Under the term "Assessment of intellectual property" we consider complex of activities of legal, economical, organizational-technical and other nature, directed towards determination of the value of the object of evaluation (namely of intellectual property), as goods of using various methods.

Legislations of various countries determine diverse rules of evaluation activities, though laws inside the country are common in evaluation of various objects. Law in the first place determines time of necessary evaluation of intellectual property and when they foresee to provide voluntary (non-compulsory) assessment of same objects.

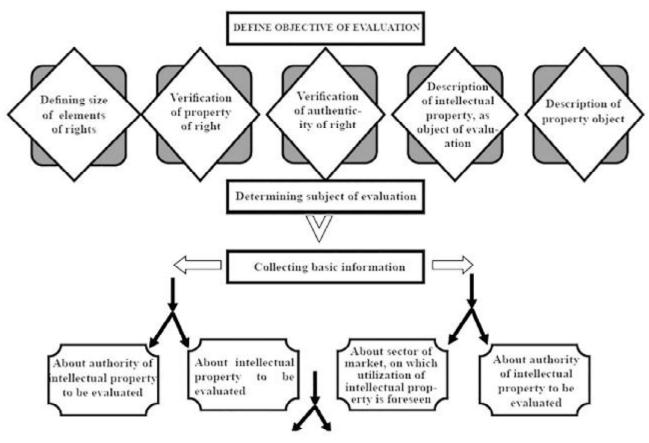
Realization of evaluating intellectual property in our country is not compulsory and is realized only at the customer's discretion (by the owners of patents, authors, investors, state authorities and other enterprises and organizations, as well as entrepreneurs and other citizens).

**Object of evaluation** are special property or nonspecial property rights or portfolio of rights on the object of various intellectual property under the ownership of legal entity or an individual, also transfer of rights on using objects of intellectual property to the third parties by the persons with the rights. This complex of rights is briefly called intellectual property.

Object of evaluation is the value of evaluation object, expressed in cash (value, price) or comparative (profitableness, purchasing tern and others) index. Following indexed belong to the valuables in cash form: market, investment, initial balance, waste balance, factual, liquidation value, value of sending, relatively probable realization value, license price or license payments. Legislation determines that in case of compulsory evaluation of intellectual property, object of evaluation is its market price.

Market value – this is probable, expected price pursuant to which given object of evaluation by the day of evaluation can be alienated at the market. Under the conditions of competition, when the parties act deliberately, own all necessary information, while the size of the value of transaction doesn't work and no special condition is expressed on it.

FIGURE 6. ALGORITHM OF EVALUATING THE VALUE OF OBJECTS OF INTELLECTUAL PROPERTY





# PROBLEMATIC FIELDS OF ASSESSMENT OF THE VALUE OF THE OBJECTS OF INTELLECTUAL PROPERTY

### PROBLEMATIC FIELDS

- Diversity of the kinds of value of the objects of intellectual property.
- Uncertainty of the essence of the instruments of special property.
- Incompleteness of methodological base of evaluation of the values of intellectual property.
- 4. Inconformity of selected method with the objectives of evaluation.
- Complexity of defining term of useful utilization of intellectual property.
- Non-effectiveness of managing portfolio of the objects of intellectual property.
- Complexity of selecting adequate strategy of using instruments of special rights.

To the comparative form of valuables belong following indexes: expected norm of profit, term of useful utilization, profitableness, term of purchasing and others.

Following condition shall be mentioned as well that pursuant to the used methodology, intermediate results of evaluation can be already provided or possible expenses, factual or possible profit. As much these indexes are used upon defining size of salary or share of partners, final outcome of evaluation can be not only the valuables of intellectual property, but also other economical parameters.

Evaluation of intellectual property is uniformity of evaluation stages, basic among them is definition goal of evaluation, determining subject of evaluation, accumulation and analyze of initial information, selection of evaluation method, settlement and determining payment.

Algorithm of assessing value of the object of intellectual property in more details is given in the Figure 6. Analytical works provided by the author in the mentioned domain gives opportunity for separation of problematic fields following evaluation of intellectual property (Table 7.)

Let us discuss specifics of separated problematic

fields in details:

1. Diversity of the kinds of values of intellectual property. Quite wide list of the values of intellectual property are given in native and foreign scientific-practical literature. The list consists of following kinds of values: market, consumer, investment, insurance, taxation, waste, utilization, liquidation, special, objective, depreciation, reassessment, perspective return, net realization, and effective value.

In the process of managing intellectual property diversity of the kinds of values give rise to numbers of problems, which are related with selective kind of the value in each specific situation, as well as with existence and incompleteness of methodology of value rating of each kind.

2. Uncertainty of the essence of the instrument of special rights.<sup>21</sup> As we have said, active reduction of native knowledge-consuming enterprises by western companies takes place under modern conditions. This is related with the fact that they understand the essence of instruments of special rights and they use them under the conditions of competition.<sup>22</sup>

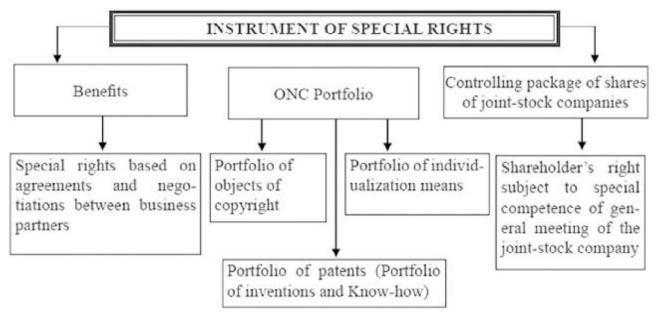
Going back to the level of inter-company manage-

<sup>&</sup>lt;sup>21</sup> **Bromberg G.V**. Intellectual Property: from Creation to Utilization. M.: INITS Rospatent, 2002. pg. 207; **Makrishev V.V. Aldoshin V.Ì.** Management of Special Rights (on Intellectual Property, Immaterial Assets) under competition. **Ì.**: INITS, 2002. pg. 212; **Feigelson V.V**. Intellectual Property and Inter-economical activity. 2<sup>nd</sup> publishing, reproduced and annexed **Ì.**: INITS Rospatent, 2000. pg.119; **Iasen F.** Age of Innovation. Translated from English. **Ì.**: INFA-**Ì**, 2002. pg. 308; **Firer S., Williams M**. Intellectual Capital and Traditional Measures of Corporate Performance, 2001. **Hunter L., Webster E., Wyatt A.** Measuring Intangible Capital: A Review of Current Practice, 2005; **Stuart T.A.** Intellectual Capital: The New Wealth of Organization. L, 1997. pg. 65-78; **Sullivan Patrick H.** Profiting From Intellectual Capital: Extracting Value from Innovation. John Willey & Sons, Inc, 1998. pg. 366.

<sup>&</sup>lt;sup>22</sup> **Quinn J. B.** The intelligent Enterprise: Knowledge and Service Based Paradigm for Industry. The Free Press, 1992; **Marr B., Chatzkel J.** Intellectual capital at the crossroads: managing, measuring, and reporting of IC. Journal of Intellectual Capital (editorial) 5 (2), 2004. pg. 224-229.



# FIGURE 8. COMPONENTS OF INSTRUMENTS OF SPECIAL RIGHTS OF THE COMPANIES ORIENTED TOWARDS MARKETS OF KNOWLEDGE-CONSUMING PRODUCTION



ment, we have same situation here as well – field of formation and utilization of the instruments of special rights remain to be insufficiently processed from methodological and methodical point of view.

Components of special rights characteristic to the companies oriented towards the markets of knowledge-consuming production are well seen in the Figure 8.

3. Incompleteness of methodological base of value rating of intellectual property. During last years solving problems of methodological provision was dedicated numbers of works of various organizations and separate authors;<sup>23</sup> on their basis it became possible to fulfill existed methods and methodological recommendations in the field of evaluation of the objects of intellectual property. Following are of the most importance" how to provide value rating of the objects of intellectual property upon investing share into the nominal capital by active enterprises; methodology of calculating costs of licenses, methodological recommendations and about value of industrial property and other objects of intellectual property, as well as calculation of the size of nominal capital created through objects of immaterial assets.

Well-known researcher of intellectual capital and intellectual property L. Lukicheva separates following directions methodological improvement of evaluating objects of intellectual property:<sup>24</sup> utilization of common international principles, criteria and methods in the standards and methodologies of evaluating objects of intel-

lectual property, calculation of assigning patent rights and the values of payments, also utilization of special (nonspecial) licenses on the objects of industrial property. This includes improvement of existed economical-mathematical methods through calculation of market index and creation of new directions. Namely, indefinite, technical, state and commercial risks (risk of unprofitableness) and other kinds of risks related with utilization of objects of intellectual property.

4. Inconformity of selected method with the goal of evaluation.

Realization of effective management of intellectual property only under the conditions of identification and qualitative evaluation the problem of selecting methods of evaluation in each specific case gives special actuality. For the business purposes, necessity of evaluation of intellectual property is created in different situations and, in the first place, is defined with specific economical interests of the subjects of market economy.

As a rule, for business purposes, those objects, which grant companies specific potential against their competitors, or it is possible to transfer them to the third parties on the basis of agreement or verdict, are subjects of economical assessment.

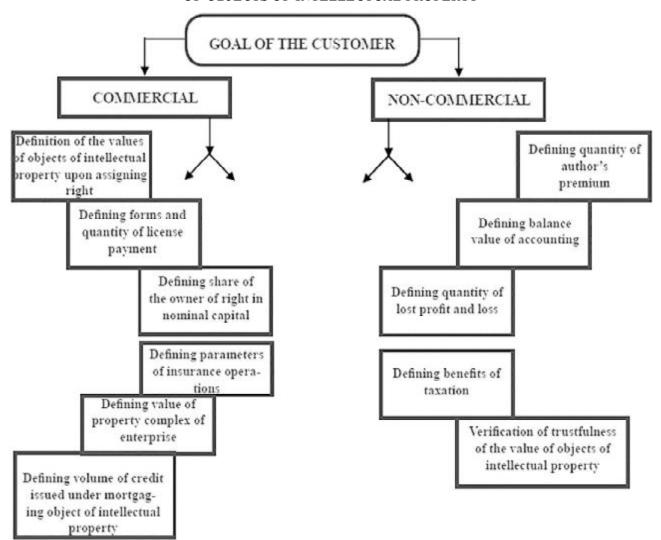
In each specific situation – customer of evaluation of the value of industrial-intellectual property is focused on specific commercial and non-commercial purposes. Basic kinds of the Customer's goals are given in the Figure 9.

<sup>&</sup>lt;sup>23</sup> **Hall R.** The strategic analysis of intangible resources. Strategic Management Journal 13 (2), 1992. pg.135-144; **Brooking A.** The management of intellectual capital. Long Range Planning 30 (3), 1997. pg. 364-365.

<sup>&</sup>lt;sup>24</sup> **Lukicheva L.I., Timofeev I.P.** Evaluation of the Level of Creative Activity and Personnel of Knowledge-Consuming Enterprises, Dn. Nauka Prosveshenie, 2005. pg. 42-45.



# FIGURE 9. BASIC GROUPS OF THE CUSTOMER'S GOALS UPON EVALUATION OF OBJECTS OF INTELLECTUAL PROPERTY



Basic methodology of assessment of intellectual property is given in the Figure 1.15.

They separate methods of expenses, incomes and market (comparative) in the context of value methods of evaluation. Analyze of the terms of utilization and reduction of utilization of this group can be shown in general way in the Table 1.6 herein.

Thus, selection of evaluation method shall be realized by taking into account peculiarities of goals of the method, terms and reduction of utilization.

5. Complexity of providing trustfulness of assessment of the value of intellectual property. Determining trustfulness of the valuable index of the objects of intellectual

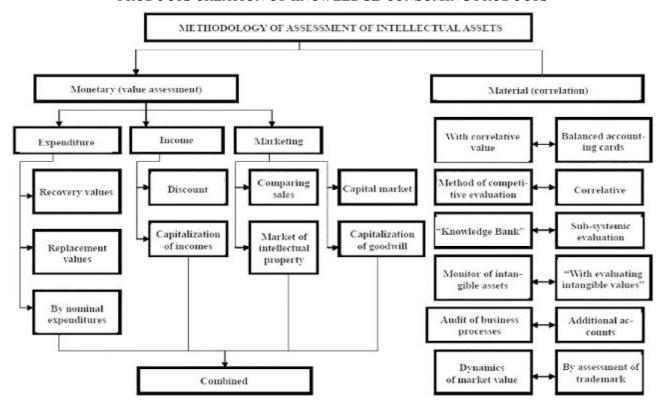
al property and defining correctness of results are final and the most important objectives. The problem of defining trustfulness and correctness belongs to the field of statistic processing of data. Though often in economical literature they speak about specific methods of processing basic data and do not discuss general methodological issues of creation and interpretation of received results. As a result, given provisions need adaptation with specific objectives, while researchers can make methodological mistakes upon calculation.

Under conditions of strong competition, researchers pay special attention to the issues of studying mechanisms of formation and utilization of portfolios of patents.<sup>25</sup> Many of them underline conditions that active

<sup>&</sup>lt;sup>25</sup> **Feigelson V.V**. Intellectual Property and Inter-economical activity. 2<sup>nd</sup> publishing, reproduced and annexed M.: INITS Rospatent, 2000. pg. 119 **N.Ì. Fonshtain.** M.: AHX, 2007. pg. 312; **Jolly Adam, Philpott Jeremy.** The Hand book of European intellectual property man-agement: developing, managing and protecting your company's intellectual property, 2007. London: Kogan Page. pg. 18; **Guellec D.** The economics of the European patent system Oxford: Oxford University Press, 2007. pg. 280; **Curtic Ceok.** Patents, profits and power how intellectual property rules the global economy. London: Kogan Page, 2006. pg. 801; **Jon Lang.** A practical guide to drafting patents. London: Sweet & Maxwell, 2007. pg. 180 and so on.



FIGURE 10. STRUCTURAL SCHEME OF CREATING KNOWLEDGE-CONSUMING COMMODITY
PRODUCTS CREATION OF KNOWLEDGE-CONSUMING PRODUCTS



process of concentration of special rights takes place in the portfolio of western transnational corporation. Activities of numbers of such corporations not only reduce manufacturers of knowledge-consuming products of other countries, but influence upon formation of new sectors of commodity markets.

Passiveness at the market of knowledge-consuming market of native enterprises is conditioned by the fact that problems of managing objects of intellectual property are left without respective attention; the issues of further transformation of such objects in immaterial assets of the enterprise become of less importance (Figure 10).

Study of problems of using special rights has evidently shown necessity of creating systemic methodological apparatus corresponding to the discussed issues. Following peculiarities of processing technologies of regulating markets of knowledge-consuming production related with utilization of instruments of special rights can be separates:

- high quality of definition of elements and structure of searching works directed towards creation of perspective samples of knowledge-consuming products;
- ◆ Probable character of expected (planned) basic parameters;
- Complexity of objective evaluation of mentioned variations of basic parameters;

- Complexity of providing control of their intermediate results or status;
- Necessity of using intellectual systems of information of experts.

### FORMATION OF PORTFOLIO OF SPECIAL RIGHTS ON THE OBJECTS OF INTELLECTUAL PROPERTY

Problems of understanding essence of instrument of special rights are related with the issues of formation and utilization of portfolio of objects of intellectual property

6. Inefficiency of managing portfolio of objects of intellectual property. Effective management of objects of intellectual property is possible in case of deep processing of theoretical-methodological elements and methodological provisions of the process of management at inter-company level. This includes processing of theoretical provisions, namely, classification of portfolios of the objects of intellectual property, as well as organization-economical mechanisms of their formation and utilization. Classification of portfolio of the objects of intellectual property is given in the Table 11. below.

Separation of the objects of intellectual property into three portfolios is related with formation of portfolio of special right and in this respect with peculiarities of scientific-technical potential of specialists attracted for this



reason, though other kinds of portfolio of the objects of intellectual property can be formed only in specific enterprise.

Company owning peculiar controlling package of special rights used in knowledge-consuming technologies at this or that market, can express pretenses on monopoly rights of work in this sector of commodity market. Herewith, antimonopoly law will not influence upon purposeful activities of given company in direction of making highest profit. The company, which controls sector of the market of knowledge-consuming products in fact, protects not only this sector, but also technologies of investments and purchasing in the enterprise (Figure 12.).

Pursuant to the above-mentioned we can say that portfolio of objects of intellectual property shall provide function of insuring investments, sales technologies and market sector. In case of violation of special right, the company violating objects of intellectual property shall return to the company owning object of intellectual property sum of wasted profit and keep high profitableness of investments.

Organization provision of the process of managing intellectual assets related with changes in global tendencies in the field of organizing knowledge-consuming production shall be built on the basis of named conditions.

Processing general principals of investments in knowledge-consuming technologies of difficult structure begins by understanding vital cycle of each technological operation. Complete vital cycle of creation of knowledge-consuming commodity products of any king and moving to the market, pursuant to the points of view of modern economists, include following private cycles:

- ◆ Scientific-research and experimental-construction works;
  - ◆ Technological preparation of enterprise;
  - Mastering;

- ♦ Industrial cycle;
- ♦ Cycle of sales;
- Formation of portfolio of special rights of the objects of intellectual property.

These cycles are provided with variations, Development of vital cycle of special rights of the objects of intellectual property shall be provided parallel to the indicated cycles. At the same time provision of enterprises producing specific items, manufacturers of production and their purchasers in the quantity of stabile sales, and at the same time selected sector of commodity market must be protected.

There are following methods of approach of portfolio of the objects of intellectual property:

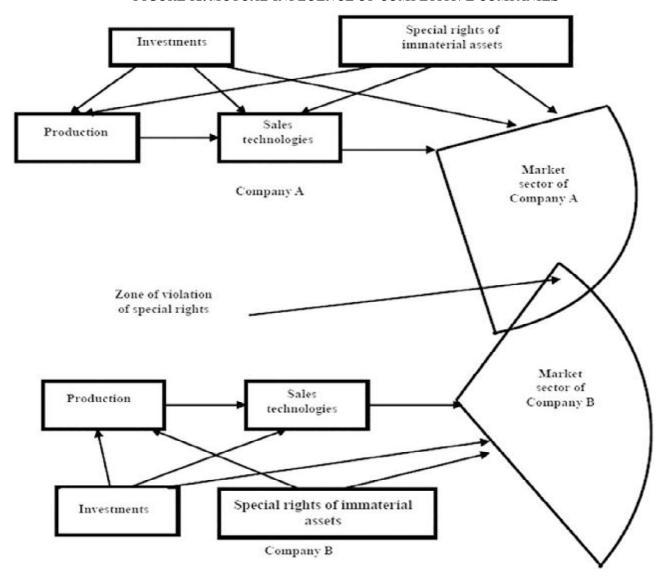
- 1. Constructive and functional methods of approach towards creation of knowledge-consuming production (constructive method of approach is related with peculiarities of construction of items, i.e. with objects, which belong to the equipments and functional method of approach is related with fulfillment of actions of material objects. i.e. objects, which belong to the method).
- 2. technological method of approach is related with peculiarities of production of productions of knowledge-consuming goods (herewith, patent protection of technological equipments is necessarily foreseen. i.e. these are the objects, which belong to the equipments, also methods of preparing or production of these or those units):
- 3. Method of approach related with realization of sales at the commodity market of selected technologies.
- 4. method of approach of formation and monopolization of large sector of commodity market (position of sales technologies and forming market sector is related with strictly expressed band name of the company and necessity of creating security with trademarks of knowledge-consuming commodity products. In some case location of creating goods).

Table 11.
CLASSIFICATION OF PORTFOLIOS OF OBJECTS OF INTELLECTUAL PROPERTY

OBJECTS OF COPYRIGHT	scientific, literature and art works     Programs for electric-calculating machines     Databases     Topology of integral micro schemes	Portfolio of objects of copyright
OBJECTS OF INDUSTRIAL PROPERTY	Inventions     Useful models     Industrial samples     Selective achievements     Know-how	Portfolio of inventions and Know-how (patent portfolio)
	Means of individualization (brand names, trademarks, service signs, name of the place of origin of goods, domain names)	Portfolio of the mans of individualiza- tion



FIGURE 12. MUTUAL-INFLUENCE OF COMPETITIVE COMPANIES



Pursuant to the mentioned methods of approach portfolio of objects of intellectual capital was formed in accordance with those basic stages, which are given in the Figure 13.

By taking into account above said, we can conclude that effective management of portfolio of the objects of intellectual property shall include mechanisms of forming portfolio of objects of intellectual property, by taking into account every technological operation of putting knowledge-consuming production to commodity market.

7. Complexity of selecting adequate strategy of using instrument of special rights. Mentioned problematic field is in close relation with the issues of strategic management of intellectual property. Selection of the strategy of enterprise in the field of managing intellectual property shall be realized by taking into account general strategy of business. Exploitative,

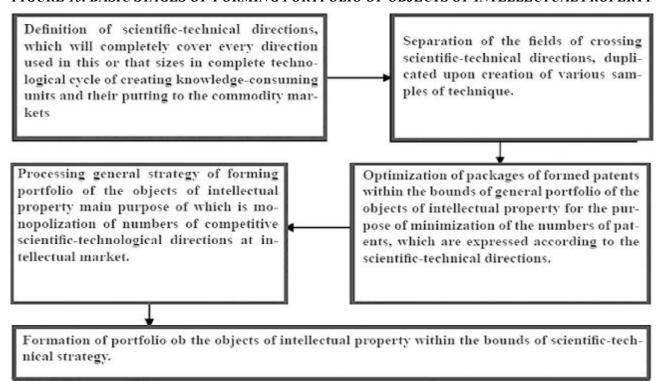
patent and violent strategies are relatively characteristic to the enterprises.

Foundation to explanative strategy is venture (risky) business, related with processing newest samples of knowledge-consuming products. Investment companies provide investment of those venture companies, which ensure investors in minimal risk of investments and profitableness of the formed commodity market. Basic peculiarities of venture market of our country are formed by the fact that local investors practically do not try to use special rights of intellectual property for strong instruments of competitive fight to gain perspective commodity markets.

Under the conditions of high-effective technologies neither its processors, nor investors try to register their right through patent authorities. Moreover the investor leaves possibilities of grabbing innovation created by him, in the first place, to its director and in the second place



### FIGURE 13. BASIC STAGES OF FORMING PORTFOLIO OF OBJECTS OF INTELLECTUAL PROPERTY



processor of the technologies. Experienced experts are able to block further scientific processing even in case of existence of minimal information obtained from competitor.

Patent strategy is realized basically within the frames of industrial and scientific programs. Peculiarities characteristic to the patent strategy of western companies are: concentration of attempts on narrow directions, economy of expenses, utilization of global achievements, and satisfaction of any desire of the consumer.

Basic directions of violent strategy consist in maximal reduction of the values of manufactured products at the expense of reducing expenditures of production. Deep study of the essence of problem gives opportunity for making more serious conclusion. The issue of reducing expenditures will turn into the problems of forming high-effective fixed assets, through which it is possible to provide massive production conditions of high-quality products; though realization of this strategy need important financial resources.

Consequently, Effective management of the

process of formation of the portfolio of objects of intellectual property at the internal level of the company, as well as its utilization in the way of the right on special instruments at the market of knowledge-consuming products, remains to be important scientific-industrial problem of the field of national enterprises.

- Existed problematic barriers in the field of accounting, as well as in the field of evaluation of audit and intellectual property can be overcome, in the first place, at the expense of improvement of legislative-legal and methodological base, by stimulation of reflecting every object of immaterial assets totally into identification and accounting; as well as by creation and improvement of inter-company systems of managing intellectual assets/
- ♦ Elimination of the mentioned problem will be supported by processing organization-economical mechanism of formation and utilization of the elements filling the system of managing objects of intellectual property, as intellectual capital, as well as processing and realization of effective patent policy



# PROBLEMS OF INTELLECTUAL CAPITAL MANAGEMENT IN INOVATING DEVELOPMENT CONDITIONS

LAMARA QOQIAURI Doctor of Economics, Professor qoqiauri@yahoo.com

### Summary

Most part of highest and middle ranges of native knowledge-consuming enterprises under modern conditions have already realized necessity of organizing management of intellectual capital of industrial subject. In this respect it is necessary to discuss peculiarities and problems of forming intellectual assets of knowledgeconsuming enterprises, as well as to evaluate and select directions of increasing effectiveness of management of process. Author of this Article of-fers solving raised questions pursuant to the mentioned domain from the point of processing and making managerial decisions. Thus management process is the process of making manage-rial decisions in relation with the raised problems. Let us discuss what are peculiarities of object and subject of management of formation and development of intellectual assets, as well as the peculiarities characteristic to managerial decisions themselves.

Effective management of the process of formation of the portfolio of objects of intellectual property at the internal level of the company, as well as its utiliza-tion in the way of the right on special instruments at the market of knowledge-consuming products, remains to be important scientific-industrial problem of the field of national enterprises.

Existed problematic barriers in the field of accounting, as well as in the field of evalu-ation of audit and intellectual property can be overcome, in the first place, at the expense of improvement of legislative-legal and methodological base, by stimulation of reflecting every object of immaterial assets totally into identification and accounting; as well as by creation and improvement of inter-company systems of managing intellectual assets.

Elimination of the mentioned problem will be supported by processing organization-economical mechanism of formation and utilization of the elements filling the system of man-aging objects of intellectual property, as intellectual capital, as well as processing and realization of effective patent policy.

**Key words:** Intellectual, inovative, management, intellectial assets, synergetic effect, value rating, algorithm, industrial cycle, cycle of sales, portfolio.