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The System of Management of the Intangible Assets in the Agricultural Enterprises

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Abstract:

For Ukraine, the need for intellectual property management is relevant, as the country announced an innovative way of economic development, which is the foundation of intellectual property. Modern developments of agricultural enterprises are based on the principles of sustainable management, competitive production and effective use of intellectual capital. Market relations need to strengthen the role of intangible assets as well as intellectual property management, thus becoming an important part of strategic management company and closely associated with the main directions of its activities. Formation of these areas and the timing of their reach – are tasks to be solved by management using strategic management. Intangible assets management business is gradually becoming a factor of sustainable development that enhances the market value of enterprises and formation of competitive advantage.

Keywords: accounting; activity; enterprise; intangible assets; management; production.

JEL Classification: M11; M 41; P17; Q13.

Introduction

Studies of intangible assets management by companies, particularly in the agricultural sector, reflected in scientific works of famous foreign and domestic scientists: Andryssen, Astakhov, Bozhko, Bocharova, Butnik-Seversky, Vachevskiy, Gavva, Edvinson, Kaplan, Klimenko, Mikhailova, Norton, Puzynya, Reilly, Repina, Savina, Sullivan, Svyatotskyi, Slavkova, Tesakov, Fedonin, Tsybulov, Shvays, and others. Analysis of existing scientific papers shows that at the current stage of economic development in the agricultural sector require further development of theoretical and methodological provisions for improving management of intangible assets agricultural enterprises. To practice agro-industrial production of particular interest are proposals concerning methodological regulations for the valuation of intangible assets on the basis of their classifications, influencing the organizational components in the control system. That is what caused the selection of research topics, defined goals, objectives and building its structure and trends.

1. Background

In current conditions there has been increasing role of intangible assets, although the study of the literature on this subject, installed no single point of view on the essence of the concept. The main summarized features of intangible assets are shown in Table 1.

Fundamental components of intangible assets are intellectual property, which is a product of the human mind, the result of creativity, partly protected by law. It is immaterial substance, it can buy, sell and rent, you can insure or to use as collateral. For all its characteristics, intellectual property has economic values, which are often reported. Today in the market economy, the company's ability to gain competitive advantage and realize their most effective method is particularly

important. Creation of competitive products on the market is subject embodiment to its inventions, know-how, industrial designs that meet global novelty and high functional properties.

Table 1. The interpretation of the definitions of 'intangible asset'

In the opinion of:	Essence definition
P (AS) 8 (Accounting Standard 8 'Intangible Asset' 1999)	Non-monetary assets that have no physical form and can be identified.
M (AS) 38	Intangible assets include scientific knowledge, development and implementation of new technologies and systems, licenses, intellectual property, market research and trade marks.
Tax Code of Ukraine (2007)	Ownership of intellectual activity, including industrial property, as well as other similar rights recognized, object of ownership (intellectual property), the right to use property and property rights of the taxpayer in accordance with legislation, accordance with legislation the right to use natural resources, property and property rights.
I.A. Blank (1999)	Set intangible assets as non-current assets that have no physical form and ensure the implementation of all major types of business.
D. Douns, D.E. Gourmet (1997)	Intangible rights or resources that give the company advantage in the market (including permission to search for minerals, import, copyright, advertising costs, organizational costs).
Glen A. Welsh, Daniel G. Short (1997)	Assets that are not physically there and give the owner the right to use them.
L.Z. Shneydemana (1993)	During intangible assets imply, a notional value of rights to objects of property rights and other intellectual property and similar alienated and property rights.
B. Needles, H. Andersen, D. Kolduel (1994)	Gave the definition of intangible assets as long-term, with no physical substance but have a value based on rights or privileges of the owner.
E.S. Hendriksen, M.F. Van Breda (2000)	Intangible assets represent objects that have proprietary implementation. The object is recognized as an intangible asset that is required to meet the definition of an asset that it can be measured, was significant and credible.
L.I. Schwab (2004)	Intangible assets understands the potential of the company, which is able to generate economic benefits for a long time, characterized by the lack of material basis of size and uncertainty of future profits from its use.

Source: Generalized by the authors.

Current studies are based on the existence of intellectual property as part of enterprise resources, and the concept of ownership of human intelligence investigated in the context of the intellectual capital of the company. Consequently, intellectual property is the result of creative activity. Its object, however, is in material media, which achieved progress in art, namely the ideas, thoughts, observations, images, symbols, etc., which are realized or embodied in some physical media.

The transition from post-industrial to the intellectual society necessitates audit of intangible factors of production. Today there is growing importance of intangible assets and especially their component – intellectual property. The main value of IP is that you can use them to monopolize the products on the market to increase supply and expand the range of consumers. Therefore, in our opinion, 'intellectual property' as an object of accounting – is the value of property rights to the results of intellectual activity rights, which are documented in fixed material things to bring economic benefits.

A modern condition increases the practical value of intangible assets. So for businesses, accountants and auditors considerable interest is the analysis of the main features of the audit (Zhavoronkova, and Melnyk 2005). In England Institute was an established controller (auditors), the purpose of its creation – to guarantee financial statements (Styuart 1999).

The notion of 'intangible assets' is used to describe the totality of intellectual property, which is generally conventionally divided into three groups (Usach 2002).

The total list of questions concerning the purchase and use of intangible assets includes the notion of economic analysis of the use of these assets. Using different methods and techniques of investigation change the amount of intangible assets; the analysis identifies the main features and provides their intended administration. Since competitive advantages allow the company to maximize the effect of the activity, the implementation of efficient and timely analysis of intangible assets will eliminate deficiencies constrain development activity (Ivanenko 2000).

2. Research Design

Particularly important is the analysis of the structure and dynamics of intangible assets, because the larger the cost in total assets, the higher the investment attractiveness of the company.

Proper economic analysis of intangible assets will provide positive indicators for their use and optimize costs for the expansion of production. Availability of intangible assets by an agricultural sector in Sumy region is shown in Table 2.

Table 2. Availability of intangible assets by an agricultural sector in Sumy region, th. UAH

Branches	2012	2013	2014	2015	2016	2016 to 2012 (times)
Ciliske economy and services rendered	304.3	217.7	1224.3	9161.6	6041.0	20
Plant growing	134.2	72.1	437.3	1013.5	216.4	1.6
including cultivation of cereals and other crops	134.2	72.1	437.3	691.2	216.4	1.6
Stockbreeding	235.4	381.2	542.0	6321.3	4218.7	18
including cattle	106.4	48.4	47.4	5877.2	4012.2	37
breeding pigs	4.0	3.4	3.9	3.6	2.8	0.7
poultry breeding	8.7	314.4	392.9	309.8	391.1	45
Providing services in crop and livestock sectors	30.6	44.6	40.4	3.2	235.0	7.7

Source: According to the Central Statistical Office in the Sumy region.

The Table above shows the growth value of intangible assets in agriculture sector in Sumy region (in 2016 their value increased compared with 2012 to 5736.7 th. UAH). This increase was due to the fact that the accounting started to show the intangible assets that were previously not shown; in animal husbandry for the respective years to 3983.3 th. UAH., Plant – by 82.2 th. UAH., Services in the fields plant and animal – to 204.4 th. UAH (Innovation Activity of Industrial Enterprises of the Sumy Region in 2012-2016; Innovation Activity of Industrial Enterprises of the Sumy Region in 2016). It can be argued that every year the cost of each type of intangible assets increases. This indicates the companies developing innovative direction. This phenomenon is certainly positive, as these investments are aimed at improving the quality parameters of production (Innovation Activity of Industrial Enterprises of the Sumy Region in 2012-2016; Innovation Activity of Industrial Enterprises of the Sumy Region in 2016).

The cost of intangible assets and the agricultural structure in Sumy region is shown in Table 3. Analyzing the structure of intangible assets in an agricultural enterprise shows increase in their value. Much of the cost falls on a group of other intangible assets. This is due to the fact that these assets are relatively new object account, and therefore the formation of the cost reports available to the enterprise intangible assets not displayed by type, as well as other intangible assets. An important place occupied in 2016, the following types of intangible assets: the right to use property – 17.6%, copyright and related rights to them – 7.6%. It should be noted that the company does not use these types of intangible assets as rights to industrial property rights and use of natural resources. To analyze the movement of intangible assets used indicators: revenue, upgrade and disposal of intangible assets. Sources of intangible assets are: purchase, free transfer, donation, contribution to the share capital and so on. In analyzing the structure of the disposal of intangible assets objects are grouped by cause disposals, sales, write-off after the end of life, donating intangible objects, and more.

Table 3. The cost of intangible assets in Sumy agriculture region

Groups of intangible assets (reflected in the reports of enterprises)	2012 the amount, th. UAH	2013 the amount, th. UAH	2014 the amount, th. UAH	2015 the amount, th. UAH	2016 the amount, th. UAH	2016 to 2012 (+;-)
The rights to use property	-	-	397.8	952.1	1246.3	+ 848.5
The right to trademark	0.6	-	4.2	8.3	10.7	+ 10.1
Copyright and related rights to them	192.2	273.5	448	507.7	542.9	+ 350.7
Other intangible assets	246.5	218.6	266.9	3020.8	5298	+ 5051.5
Total	439.3	492.1	1116.9	4488.9	7097.9	+ 6658.6

Source: According to the Central Statistical Office of Sumy.

Dynamics of receipt and disposal of intangible assets in the Sumy region shown in Table 4 and Table 5, it can be stated that the share rights to use property in agriculture in 2016 increased by 59.7 points compared with 2012, the proportion of marks for goods and services decreased by 85.5 points, which was due to the increase in the value rights of trademark in the region. The share of copyright and related rights in 2016 increased by 31.7 points compared to 2013 and decreased by 26.2 points compared to 2012 (Innovation Activity of Industrial Enterprises of the Sumy Region in 2012-2016; Innovation Activity of Industrial Enterprises of the Sumy Region in 2016).

Analyzing the state of presence, movement and use of intangible assets at the agricultural enterprises can conclude their low use in commercial circulation enterprises as Ukraine in general and in particular the Sumy region, although every year there are some changes to attract intangible assets. This indicates a lack of understanding on enterprise manager's efficiency in the implementation and use of enterprises intangible assets.

Agriculture of Ukraine as an important component of the national economy also requires the development, implementation, commercialization and effective use of intangible assets. On the other hand, the natures of intangibles application similar to the fixed assets they are used for a long time, make a profit, but in use lose their value. It should be stated that the national practice of formation of intangible rather complicated and complex task. Many managers and specialists of the concept of intangible assets directly associated with vastness, abstraction of real value. Being under regulatory accounting model the company and without methodical assessment and mapping tools intangible elements, management has not adequately imagine the necessity and possibility of increasing the real market value of the company by signifies our strong and sustainable management of intangible assets.

Each company at all levels and in all functional blocks of a control mechanism. And some of the benefits of emphasis on certain methods of management mechanism will have an appropriate name. In this case the object controls are intangible assets, and the intended use of these assets – primarily economic. Entity management is the manager responsible for the management of intangible assets.

Table 4. Dynamics of intangible assets in the Sumy region and in agriculture in 2012-2016, th. UAH

Groups of intangible assets	2012			2013			2014			2015			2016		
	Sumy region	including agriculture	Agriculture in% to region	Sumy region	including agriculture	Agriculture in% to region	Sumy region	including agriculture	Agriculture in% to region	Sumy region	including agriculture	Agriculture in% to region	Sumy region	including agriculture	Agriculture in% to region
Human use of natural resources	38.7	-	-	3	-	-	986.6	-	-	0.4	-	-	0.4	-	-
The rights to use property	198.3	1.3	0.7	518.2	432.2	83.4	483.9	456.9	94.4	531.2	469	88.3	480.5	290.4	60.4
The right to trademark	2.1	1.8	85.7	63.7	4.6	7.2	254	5.1	2	429.3	6.3	1.5	1270.9	2.6	0.2
Rights to industrial property	-	-	-	24.2	-	-	36.3	-	-	10.6	0.2	1.9	38.3	-	-
Copyright and related rights to them	270.6	225.8	83.4	271.9	241.9	88.9	75.8	6.8	9	175.8	112.9	64.2	223.6	127.9	57.2
Other intangible assets	2231.1	43.4	1.9	2536.4	215.6	8.5	8725.5	6746.9	77.3	6327.1	5341.7	84.4	8369.8	317.3	3.8
Total	2740.8	272.6	9.9	3417.4	894.3	26.2	10562.1	7215.7	68.3	7474.4	5930.1	79.3	10383.5	738.2	7.1

Source: According to the Central Statistical Office of Sumy region.

Table 5. Dynamics disposal of intangible assets in the Sumy region and in agriculture in 2012-2016, th. UAH

	2012			2013			2014			2015			2016		
	Sumy region	including agriculture	Agriculture in% to region	Sumy region	including agriculture	Agriculture in% to region	Sumy region	including agriculture	Agriculture in% to region	Sumy region	including agriculture	Agriculture in% to region	Sumy region	including agriculture	Agriculture in% to region
Human use of natural resources	2.9	-	-	0.3	-	-	9.5	-	-	512.9	-	-	-	-	-
The rights to use property	218.3	-	-	95.2	76.9	80.8	76.8	51.6	67.2	996.3	867.6	87.1	913.6	712.9	78
The right to trademark	0.2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
Rights to industrial property	997.4	-	-	-	-	-	54.2	-	-	-	-	-	-	-	-
Copyright and related rights to them	2.8	-	-	3.7	-	-	8.8	-	-	12.5	0.3	2.4	10.2	-	-
Other intangible assets	632.1	116.9	18.5	1670.4	57.3	3.4	562.2	89.2	15.9	2187.9	2014.4	92.1	2317	310.2	13.4
Total	1853.7	116.9	6.3	1769.6	134.2	7.6	711.5	140.8	19.8	3709.6	2882.3	77.7	3242.8	1023.1	31.5

Source: according to the Central Statistical Office of Sumy region.

3. Results

The results of the study determines the substance and economic meaning of intangible assets suggests that as an object of scientific knowledge of intangibles is a complex and multifaceted structural element in economic theory today that according to the requirements of the modern market economy oriented to the world economy more identified with the subject of intellectual property and the implementation of innovative processes in the economic activity Patriotic znyanyh enterprises, including - and agricultural enterprises in Ukraine.

When it comes to intangible assets management system, its economic component will consist of both methods, and in order to function. The organizational component in turn is not limited to organizational management, and will include structural, administrative, social and psychological aspects, and the interaction is carried interpenetration of organizational and economic elements management mechanism.

Also, consideration of any system is not possible without defining its main components - control and manageable. The control subsystem includes a set of bodies and individuals with which to manage the activities of the system or its individual elements. It consists of several stages. First of all - line management, then - his deputies, heads of administrative units.

In controlled subsystem are the following components:

- (1) forecasting and planning (define prospects and future status of various areas in intangible resources);
- (2) organizing (streamlines management and its elements, relationships and performance in time and space);
- (3) coordinating and regulating (coordinates directions, combining efforts and corrects the plans);
- (4) motivating (creates conditions for effective and creative work and maintains a constant concern of employees at the end result);
- (5) analytical (providing quantitative and qualitative assessment based on a simplified separation of the object being studied, warehouses, comparison and synthesis conclusion about the state of the object as a whole);
- (6) the accounting and control (conducting systematic supervision of the actual implementation of local and connected management processes in defined time points).

Most management functions intangible assets is patent information, marketing, financial and other parts of the modern enterprise, while Western companies are trying to ensure the integration and coordination of basic functions by creating a separate unit or department that deals exclusively with issues of intangible assets management.

Creating such a unit allows concentrating all the basic functions within a single structural unit, enhancing the validity of management decisions at all stages of intangible assets by optimizing the circulation of relevant information sources in the enterprise and beyond.

Therefore, intangible assets management system – Is a system of interrelated elements and objects (types of intangible assets), in which the transformation controls the desired state of intangible assets, which, with the impact of the environment as a result of creating the expected economic impact.

Functioning of intangible assets management should be carried out in accordance with scientifically based principles:

- (1) The principle of unity of the system – means the combination of components of the mechanism in an integrated system to maximize the economic efficiency of their use over time;
- (2) The principle of continuity – the creation of organizational and economic conditions, which provide effective continuity of intangible assets (reliability of the control system, the presence of feedback between the structural units and facilities management systems, the relevant measures to eliminate deviations);
- (3) The principle of dynamic – availability management mechanism of adaptability to changes in the internal and external environment;
- (4) The principle of planning – focus system to solve long-term problems. Integration of organizational and economic mechanism of economic management mechanism and development strategy is possible because it provides strategic, tactical and operational planning;
- (5) The principle of scientific validity – methods and means of managing intangible assets must be tested in practice, and of course scientifically justified;
- (6) The principle of effectiveness – the ability to use a large number of options to achieve this goal, and the most effective choice.

Thus, at this stage of the state regulation system of accounting and valuation of intangible assets in domestic industrial enterprises, including in agricultural enterprises, defined a problem for the management of intangible assets and implementation of economic models of decision support optimization of existing methods to assess efficiency intangible assets.

Defined problem is its relevance for the reason that, according to studies outlined problems given the opportunity to develop innovative processes, especially through appropriate and effective use of intangible assets in domestic industrial enterprises; its solution can increase yield and profitability of business enterprises.

Practice has shown that the accumulation of new knowledge ineffective if they are not due to become technological means or saving technologies for implementation in production. This will transform the agro-industrial production to the development of scientific and technological progress. So, without the involvement of research developments, material production science is unable to turn into productive force. For our country intellectual property management is very important issue, as was proclaimed an innovative way of economic development, which is the foundation of intellectual property. In recent years, the tendency to solve the economic problems of intellectual property, namely the problem of managing intangible assets as part of the intellectual property of the company.

Consequently, the management of intellectual property is an important part of strategic management and interconnected with the main directions of its activities. Formation of these areas and the timing of their achievements - a task that must be addressed by management using strategic management. Effective use and management of intangible assets is one of the main directions of economic and social welfare of the individual enterprise and competitiveness of the national economy.

We believe that the creation of a conceptual system of intangible assets in agricultural enterprises should disclose several problematic aspects:

- definition of functional and structural representation of IA management on industrial enterprises of Ukraine;
- the disclosure process, organization of information security management IA;
- definition of IA assessment on the industry;
- definition of evaluating the effectiveness of management in an industrial plant IA;
- measurement of the commercial potential of the IA in various stages of implementation (creation or use) IA;
- presentation of IA internal management model under construction (installation) intelligent (innovative) product.

The proposed system of intangible assets in agricultural enterprises in Figure 1.

To address issues of improving the management of intangible assets in agricultural enterprises of Sumy region developed system satisfies the following conditions, namely:

- (1) The full information provides analysts in the analysis and management of intangible assets in agricultural enterprises, since this depends on the depth and accuracy of research using economic entities intangible resources;

- (2) Implementation of the management structure and dynamics, presence, movement efficiency and liquidity of intangible assets, determination of reserves to increase production volumes;
- (3) The introduction of a systematic approach using intangible resources of agricultural enterprises, as only a systematic approach will provide the most optimal and most effective presence and movement of intangible assets in the enterprise.

Systematic study of intangible assets allows us to consider them as a set of elements, which makes the relationship holistic properties of the set. The emphasis is on identifying the set of connections and relationships that take place in the middle of a facility and in its relations with the external environment.

Properties of intangible assets as an integrated system defined not so much by adding properties of its individual elements, such as the properties of their structure, specific system-integration and connections.

The strategy of further development of the food industry is aimed at creating a competitive industrial complex capable after integration and globalization solve the basic problem of socio-economic development and strengthening of Ukraine as a high-tech state.

The analysis to determine further ways of improving the usage of intangible assets, includes:

- compliance with the strategy of its own technical, organizational and economic development;
- shift to the maximum technical reequipment and reconstruction;
- systematic updating the technological base of related industrial parts of agricultural enterprises that are expected to improve the basic performance of intangible assets.

Using the proposed system of intangible assets, will allow the company to ensure high growth rate of financial resources which will fully implement the task, and provide long-term competitive advantage in the market.

For an overview of the main indicators of the company, innovation is the only source of information statements. The information contained in the accounts must fully satisfy users, although mainly reflects the current reporting data on material resources, leaving aside intellectual assets. The most detailed information on intangible assets is reflected in the notes to the annual financial statements (Form 5), approved by the Ministry of Finance of Ukraine number 302 of 29.11.2000 year [Order of the Ministry of Finance of Ukraine 'About the Notes to the Annual Financial Statements' (№904/5125 on 29.11.2000)]. All businesses in addition to the notes indicate to what cost in the balance of intangible assets recorded.

By carrying out a detailed analysis of the notes to the annual financial statements, we concluded that it does not contain data on revenues and however associated with the usage of intangible assets, even though the data describing innovation activities of the enterprise. Also, the current financial statements can not be used for a full analysis of the effectiveness of innovation and management decisions using intelligent products. Therefore, we consider it appropriate to amend the Notes by reviewing some indicators.

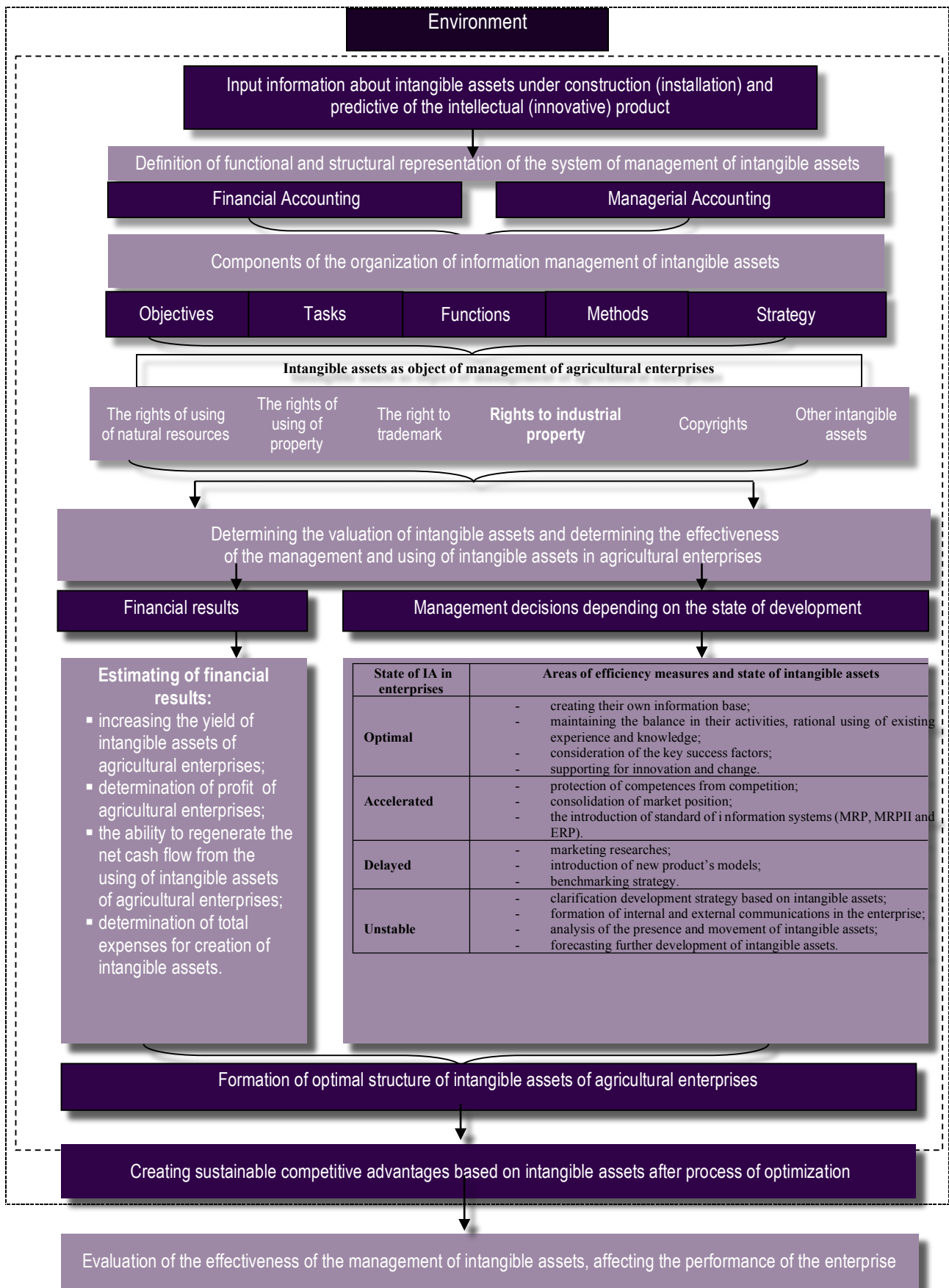
In order to develop proposals advisable to divide intellectual property into separate groups:

- intellectual property under construction;
- intellectual property, whose presence confirms protective documents (patents, certificates) stating the original value;
- assets, whose presence confirms agreements with certain cost (license);
- intangible assets held for sale.

In order to display all the rights held by the company in respect of intellectual property appropriate to name rows 030, 040, 050, 060 change according to the classification used by the State Department of Intellectual Property.

Today's statements indicates the nature of the rights to intellectual property: exclusive or non-exclusive. Therefore, they should be displayed separately.

Also, the display should review spending on research and development of off-balance sheet. As we studied companies with invaluable intellectual property should be displayed separately reporting Notes 'Intangible assets in the evaluation process.' In accordance with the requirements of paragraph (S) 27 'Non-current Assets Held for Sale and Discontinued Operations', approved by the Ministry of Finance of Ukraine number 617 of 07.11.2003 year. [Accounting Standard 27 'Fixed Assets Held for Sale and Discontinued Operations'. 2003] provided mapping intangible assets held for sale, although fixed assets separate row in the notes. Intangible assets are traded, because they provide value to indicate separately in Notes.



Source: Authors' elaboration.

Figure 1. Internal control system of intangible assets of agricultural enterprises

We believe that it is necessary to conduct an internal audit, that is checking the rights of enterprises to use land, water, objects of industrial and intellectual property. Auditors for the technical examination of intellectual property and the implementation of legal analysis of documents confirming the right to property may involve the need for patent attorneys and lawyers. The purpose of the audit of intangible assets is authentication data on the value of intangible assets recorded in the financial statements.

Despite numerous regulations in the audit, there are a lot of intangibles audit issues remain unresolved. The main areas of audit intangible assets are;

- (a) development mechanism of practical application of international auditing standards in Ukraine;
- (b) use of experience of international audit firms in intellectual property;
- (c) development of measures that are expected to eliminate the monopoly of certain audit firms on audit services;
- (d) development of audit methodology and technology through the use of computer technology, information technology;
- (e) improving reporting forms audit firms.

Audit intangible assets will compile a list of intangible assets and ensure that all property properly transferred to the owner are protected. The audit will also provide the identification and documentation of intangible assets and allows you to fix any errors that were made using enterprise data assets. Of particular importance is the technological audit, providing detection developments, technologies and intellectual property in enterprises, their further capitalization by providing legal protection and technology transfer.

Technological audit company is one of the main functions of the commercialization of research. This testing process methods, techniques and procedures used in the organization to assess their performance and efficiency evaluation of commercial potential and prospects for commercialization of research and development work, identifying opportunities to commercialize knowledge, to make recommendations to improve the management of intellectual property and placement priority use of resources for its commercialization. In this respect, the audit - part of the overall strategic planning of the organization that the organization is inseparable from.

Technological audit company are checking technological methods, techniques and procedures used in the organization to assess their performance and efficiency. Technology is a one-time event and continuous process of evaluation. In the most general form of technological audit – a way to test the technological state of the enterprise with certain criteria enabling identification of its strengths and weaknesses, leading to the formulation of strategies aimed at improving the efficiency of.

Technology audit has described the needs and opportunities in innovative businesses with respect to different points of view:

- positioning product market definition that would promote a competitive and sustainable enterprise development;
- technological areas that require priority attention: automation, information technology, etc.;
- overall plan problems that require innovative solutions: performance, quality control, energy, environment, flexibility, etc.;
- means of technology transfer – training, technology partnerships (nationally or internationally), technical assistance, intellectual property, finance, etc.;
- sources and channels of innovation relationships that need to be developed: customers, suppliers, technical centers, research organizations and others.

The task of the audit process – providing selection, concentration and optimize the use of resources companies to commercialize the most promising developments. Technology audit is a filter that provides a selection of development of the commercial potential and makes it possible to optimize the cost of the project.

Technology audit is particularly important for enterprises engaged in innovative activities. It provides a thorough analysis of technology, experience, knowledge, equipment, and other tangible and intangible assets as a whole or its structural unit, and have the potential to be commercialized.

In the course of the audit process, we can distinguish three main stages:

- the first stage – a review of the technologies used in the enterprise, assessment of its position on the use of these technologies;
- second stage – a review of technologies used in other enterprises, especially competitors, and identify technological standards, that is the best technology that is practically used. The main management tool solution to these problems is a benchmarking;
- third stages of the audit company are matching technology used with the identified technological standards to assess their relative performance, and therefore – perspective. The main management tool for solving problems of the third stage of the process is to analyze the portfolio audit technology organizations.

Economic analysis of intangible assets is aimed at identification of reserves to improve their use, something related mechanism for evaluating the effectiveness of intangible assets in the business enterprise. Economic analysis and efficient use of intangible assets of agricultural enterprises consider the example of JSC 'Akhtyrsky packing plant' and 'Konotopmyaso'.

One of the controversial issues is a recording company-user payment amount for the use of intangible assets. Regarding this issue is a fundamental question, which is to cost activity they should be classified.

In our opinion, the costs incurred in the acquisition of the relevant rights to use intangible assets should immediately write off the costs of operations. Loans secured by intangible assets – a phenomenon in the West is not new and widespread. Information, image, ideas are seen as the product of a particular market price.

In Ukraine there is a perception that can not only lend on the security of tangible assets but also intangible values, however, Ukrainian banks are in no hurry to enter the market with this service. Intangible assets due to lack of physical content regarded as something unimportant and insignificant, while the capitalization of some Ukrainian companies significantly exceeds the net book value of tangible assets.

The use of intangible assets as collateral is relevant for two reasons. First, the borrower receives additional opportunities to grow your business and keeps tangible assets as a reserve to attract additional debt financing. Secondly, the bank is expanding its potential customer base and reduces the cost of customer service.

At the current stage of development of the banking business in Ukraine there are proposals for loans secured by intangible assets. Bold bankers agreed to lend under well-known brands.

The main problem of intangible assets as collateral, primarily, is the inability of some banks properly evaluates the cost and cost elasticity of this asset. And no wonder: the cost of, for example, a particular brand is difficult to determine the amount. Under the rules of its collateral assessment should be the amount that the lender could help out in case of default of debt.

In our opinion, there are some problems that exist in assessing the trademark:

- (1) The main reason for the reluctance of companies to assess trademark is that the analysis should be given full financial statements with real cash flows;
- (2) Another reason is the underdevelopment of market information services - information secrecy. In many cases, information about the transaction has closed status, that is confidential. However, to carry out an analytical study of the market and determine the distribution of its particles, it is important to have data from all companies. In Ukraine, such information is often not available, precluding the use of valuation techniques of Western trade marks;
- (3) The opacity of many Ukrainian enterprises and companies reluctance to inform themselves greatly complicate assessment marks and reduce its accuracy.

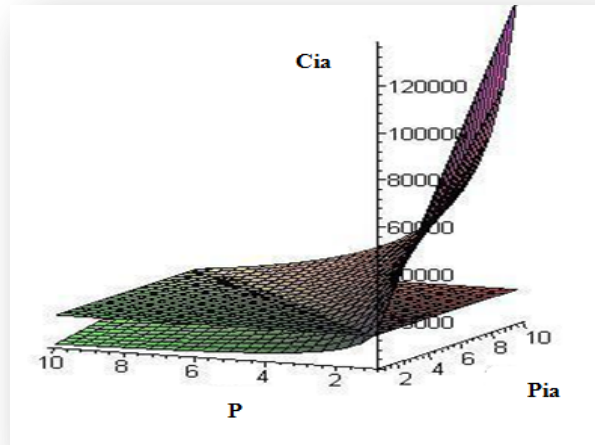
To assess the effectiveness of intangible assets in the proposed expect profits from the use of intangible assets that directly affect the performance of the company based factor exposure and the second type of intangible asset on enterprise performance:

$$\left\{ \begin{array}{l} \frac{\sum_{i=1}^n C_{ia} \times C_i}{\sum_{i=1}^n C_i} \\ P_{ia} = P \times \frac{\sum_{i=1}^n C_i}{C_{fa}} \\ \frac{P_{ia}}{P} \geq \frac{C_{ia}}{C_{fa}} \end{array} \right. \quad (1)$$

Source: Authors' own elaboration.

Where: P_{ia} – profits from the use of intangible assets that directly affect the performance of the enterprise, th. UAH; P - profits that company receives from sales, th. UAH; C_{ia} - cost of intangible asset, th. UAH; C_i - coefficient of influence and the second type of intangible asset on enterprise performance; C_{fa} - the cost of fixed assets, th. UAH; V_{ia} - the value of intangible assets in the value of fixed assets, th. UAH;

Graphical representation of this dependence is shown in Figure 2.



Source: Authors' own elaboration.

Figure 2. Evaluation of profit from the using of intangible assets

The survey results give reason to assert that the increase in profit from the dynamics of intangible assets that directly affect the performance of the enterprise, indicates their effective use.

Theoretical, this study was applied in practice enterprises to assess its economic results.

Determining the performance of intangible assets is shown in the Table. 6.

We emphasize that the presence of intangible assets as part of fixed assets can significantly affect the amount of tax payments to budgets of different levels. The increase in depreciation could increase the cost of high technology products and the possibility of reducing the tax base for income tax. In addition, the company may be exempted from VAT if a deal is made of patent licensing agreement or contract for copyright transfer.

Table 6. Performance indicators of intangible assets JSC 'Okhtyrka Meat Plant'

Indexes	Years		
	2014	2015	2016
The total cost of intangible assets, th. UAH (Cia)	28	30	32
including those that directly affect the performance of the enterprise, th. UAH (Pia)	12	13	14
Profit company receives from sales, th. UAH (P)	56	71	92
Profits derived from the use of intangible assets that directly affect the performance of the enterprise, th. UAH (Pia)	14	16	28
The share of profits from the use of intangible assets in total income (Pia/P)	0.25	0.22	0.3
The share value of intangible assets in the value of fixed assets (Cia/Cfa)	0.43	0.43	0.44

Source: Calculated by the authors.

Analyzing the level of intangible assets can give cost characteristics of scientific and technological potential of the company and evaluate its ability to maintain competition in the market of the product; intensify the process of attracting investment, increase the overall value of assets, thus boost the image of the company and the degree of confidence in the products, which in turn will lead to additional income through goodwill.

Conclusions

Based on the practice of agricultural enterprises, we can conclude that commercialization IA benefit from issuance IA components both within the enterprise and beyond. As a result of the introduction of IA into economic circulation can receive the following benefits:

- (1) Using IA can give the value characteristics of scientific and technological potential of the company and evaluate its ability to maintain competition in the market of high technology products.
- (2) Having IA as part of fixed assets can significantly affect the amount of tax payments to budgets of different levels. The increase in depreciation could increase the high cost of technology products and the possibility of

reducing the tax base for income tax. In addition, the company may be exempt from VAT if a deal is made of patent licensing agreement or contract for copyright transfer.

- (3) The increase in cost of products on the market could significantly change the competitive environment in the commodity market and will form a market sector that focuses on customers who buy most expensive products. In fact, the introduction of IA in the composition of fixed assets can stimulate the formation of new sectors of the commodity market and new financial strategies.
- (4) The introduction of IA in the composition of fixed assets may intensify the process of attracting investment. In this case, the act IA system guarantees and investment insurance. This time can be significantly enhanced if the main objects IA will perform patents. That patent can be pledged in attracting investment.
- (5) The introduction of IA in the composition of fixed assets will increase the overall value of the company, thus will boost the image of the company and the degree of confidence in the enterprise, which in turn helps to ensure additional income at the expense of goodwill.
- (6) IA have value and can be used, at the conclusion of transactions in IP rights; the authorized capital; IP creation; pledge; insurance; donation for donation and other transactions related to the change of ownership in existing company or part of it, which in turn is a factor in increasing the efficiency of the company and its profitability.

The analysis to determine further ways of improving the use of intangible assets, including: (a) compliance with the strategy of its own technical, organizational and economic development; (b) shift to the maximum technical re-equipment and reconstruction; (c) systematic updating the technological base of related industrial parts agricultural enterprises that are expected to improve the basic performance of intangible assets.

Formation of intangibles in practice rather complicated and complex task. This is due not only to the specific object management, but low understanding of the need for the leaders of the government, and the lack of existing organizational and management tool. Therefore, the formation of intellectual capital - a complex multistage process, much of which depends on human capital, which causes considerable difficulties in planning, organizing and controlling the creation of intellectual products.

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