

A role and task marketing of knowledge on the modern stage of economic development

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Introduction

In 90th of XX century information and knowledge began to go out on the first roles. among the factors of the economy growing To product ability and use knowledge everything is in a greater degree determined competitiveness, both separate enterprises and establishments and national economies on the whole, economic power of the state, welfare and quality of life of its people.

To Ukraine which keeps still powerful enough, but such not developing system of knowledge producing (including in the most perspective industries) what, however, little influence on the processes of socio-economic development of country, has to use methods and marketing tool for the searching ways of introduction knowledge in practice of enterprises activity and establishments, state and public intuitions. Marketing will enable to find out the most perspective knowledge development directions which it follows to stimulate, to develop the complex of marketing of knowledge and others.

1. Analysis of the last researches and publications

Many domestic and foreign research workers investigated marketing of knowledge. Bases marketing of knowledge are showed in the studies of foreign scientists, particular, such as (Albert Simard, 2006), (Thomas A. Stewart, 1996), (Thomas Davenport and Lawrence Prusak, 1998), (Bill Bishop, 1996), (Don Tapscott, Anthony D. Williams, 2006) and others¹. They showed possibility of application both marketing traditional instruments and methods, mainly for commercialization (advancement) knowledge and newest, that arose up with distribution the Internet, what substantially extend possibilities marketing of knowledge. Row of authors, in particular D. Roessl, M. Fink, S. Kraus, S. Hänninen, A. Ainamo (their joint study²), light up the features of application of marketing tool at the highly technological products market.

Present works of the Ukrainian and Russian authors, such as (Matviiv M.Ya., 2007), (Goldobin M.D., 2009), (Yakshin A.S., 2010) and others touch³, mainly, the problems of the educational marketing.

However much foreign, such domestic research workers practically do not probe the feature of the marketing providing of control system by knowledge on all stages of their producing, distribution and use.

Accordingly, appears a problem of forming market oriented mechanisms on marketing principles of management of producing and distribution of wide spectrum of knowledge processes in different areas of human activity.

Concordantly (E. Tofler, 2004) knowledge is one of three basic sources of power: force (state, military and others), finances, knowledge. Thus meaningfulness of knowledge as sources of power grows constantly.

It should be noted that power and efficiency of the use of knowledge can show up only in combination with two other sources. By confirmation there is a fact of «outflow of brains» from countries with a transitive economy (including Ukraine, Russia, others), and also those which develop, to the countries - leaders of socio-economic development, which strengthen the intellectual capital and competition potential thus. That presence of knowledge, without the proper support and, by a decision measure, to claimed from the side of the state and

¹ Knowledge market: http://en.wikipedia.org/wiki/Knowledge_market

² Dietmar Roessl. Managing uncertainty in the marketing of new-technology products / Dietmar Roessl, Matthias Fink, Sascha Kraus, Seppo Hänninen, Antti Ainamo // Int. J. Technology Intelligence and Planning, Vol. 4, No. 1, 2008. : <http://soc.utu.fi/laitokset/iasm/RoesslEtAl2008IJTIPvol4no1.pdf>

³ Serbinovskiy B.Yu. Marketing of economy of knowledge and marketing of knowledge. Part 1. / B.Yu. Serbinovskiy // Scientific magazine of KUBGAU. – 2011. - № 74 (10): <http://ej.kubagro.ru/2011/10/pdf/36.pdf>

business, unable to provide the economy growing. Knowledge and their transmitters "will flow" there where they will be estimated properly.

From the other side, the presence of capital and efforts of the state can't quickly create the system of producing and use of knowledge. In particular, Ireland, Brazil, Mexico, Turkey others inlay an enormous after Ukrainian measurements money in development of science as a main source of knowledge, however much they attained the today's level of Ukraine even⁴.

In these terms for a domestic economy on the whole, and also its separate elements – enterprises and establishments, appears the necessity of methods and marketing instruments application for perspective directions determination of producing of knowledge, and also search of effective methods their distribution and commercialization. For this purpose expedient to apply the separate type of marketing – marketing of knowledge, which would represent the specific marketing methods and instruments application in relation to knowledge as intellectual product, how to apply capabilities information in the concrete types of activity (Melnik, 2005).

Thus, a research aim is determination role and tasks marketing of knowledge on the modern stage of economic development, features of its application, in relation to different areas of activity, establishment of relations of its instruments and methods, with other types of marketing.

2. Elements and structure of knowledge

Efficiency marketing of knowledge to a great extent depends on exactness of understanding category «knowledge», determination their elements and structure.

Knowledge must be understood the applying ability certain aggregate facts and rules for the decision tasks in certain subject area.

Analysis and generalization of literary (Melnik, 2005) and Internet sources^{5,6} allowed to offer author systematization elements of knowledge such as (Ilyashenko S.M., 2012):

- system of persuasions and moral values, which have based on a faith God, nature force , atheism, accepted rules of conduct, public relations, ideas and conduct of surroundings (relatives, friends, colleagues, etc), and others;
- scientific knowledge (ideas, theories, hypotheses, scientific laws, conformities to law, concepts, and others), in thereby theoretical and empiric;
- esoteric knowledge (unscientific);
- intuitional knowledge which do not need leading to;
- vital knowledge, what are got in the process of vital experience;
- technological knowledge (patents, inventions, now-how, algorithms, procedures, technologies, drafts, and others);

professional knowledge, in thereby now-how, skills, abilities, experience and others.

⁴ Maksym Strikha. This power needs people who serve it, but not scientists // Ukrainian truth: <http://life.pravda.com.ua/person/2012/07/25/107633/>

⁵ Knowledge: <http://ru.wikipedia.org/wiki/%C7%ED%E0%ED%E8%E5>

⁶ What is knowledge?: <http://ei5.ru/?p=1128>

Knowledge also divided into formalized and unformalized, obvious and non-obvious, documented and not documented, declarative and procedural. Each type of knowledge has the features and needs their account in the process of realization the tasks marketing of knowledge.

Author systematization of knowledge is given on fig.1. Shading on pic.1 mainly procedural knowledge are given.

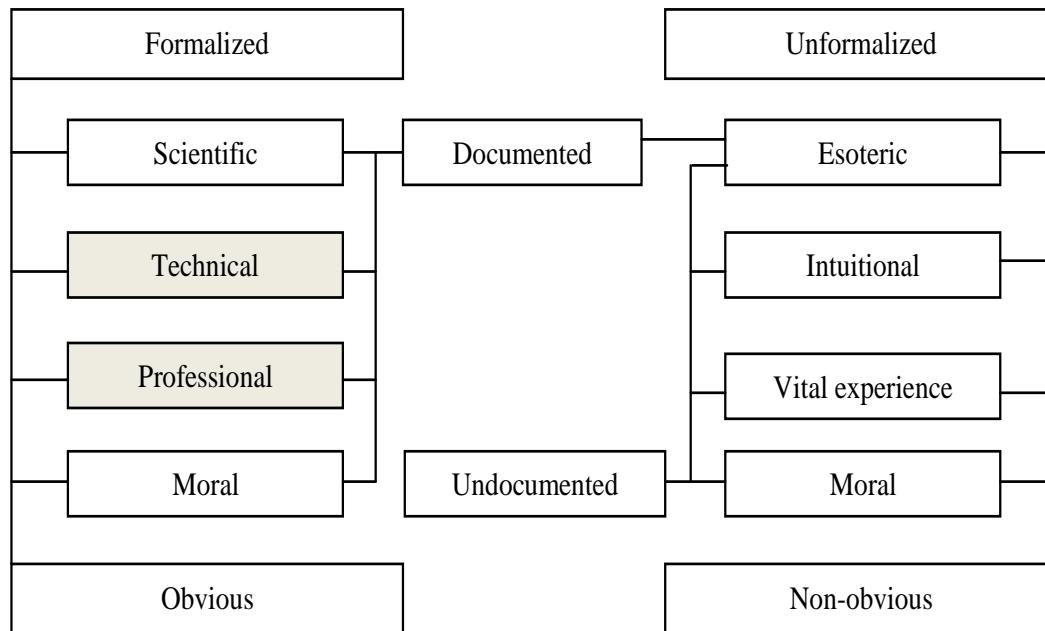


Fig. 1. System of knowledge

From fig. 1 follows, that the object of marketing of knowledge can be, mainly, documented knowledge: scientific, technical, professional.

3. The role and tasks marketing of knowledge

Marketing of knowledge is determined by author as a marketing variety and, simultaneously, conception market oriented activity in relation to sending of system producing of knowledge to their most perspective kinds, commercialization of knowledge, whether other their use which will assist development of separate organizations and state on the whole.

The role marketing of knowledge on a macrolevel (even states) consists in determination (prognostication) of perspective directions appearance new and development existent knowledge, which is taken into account at the ground of choice most effective, with present potential and external terms, taking into account the prospects of their development of strategies of state innovative development. For Ukraine – strategies of the innovative passing (Illyashenko S.M., 2010). Except that, it plays an important role at forming of knowledge oriented innovative culture (Shipulina, 2010) which acts part as social-cultural mechanism of adjusting innovative conduct of human and society on the whole. It provides perception by people and organizations the innovations, their willingness and ability to create, to support and use innovations which are based on intellect and knowledge, in all spheres of vital functions.

On a microlevel (levels of separate enterprise or establishment) the role marketing of knowledge consists in the orientation the system producing of knowledge on those its kinds which with large probability will find demand at the market, forming and stimulation of demand on the concrete types of knowledge, which are incarnate in scientific developments (scientific knowledge), skills, experience, jurisdictions, ability and others (professional knowledge), technical document, in particular, designer and/or technological, algorithms and others

(technical knowledge). That, marketing of knowledge is instrumental in producing actual knowledge and their commercialization.

The basic tasks marketing of knowledge:

- prognostication of directions appearance new and development existent knowledge;
- an exposure of requirements in knowledge;
- search of industries application knowledge;
- orientation of the system producing of knowledge on those their kinds, which use, whether will in a prospect have demand at the market (mainly, it touches the applied knowledge);
- forming the system of pricing on knowledge;
- forming and stimulation demand on knowledge;
- advancement of knowledge.

Will consider the features of decision selected tasks.

3.1. The prognostication of directions appearance new and development existent knowledge

It is a very difficult task with the presence of elements incomplete definiteness both in relation to the prognostication and possible prognoses. In relation to fundamental scientific knowledge in the more or less protracted prospect it is extraordinarily difficult to decide such task, as too large degree of vagueness. However for the applied scientific, technical and professional knowledge which can have practical application, directions of appearance new and development existent knowledge (in relation to select areas of activity) to forecast it is possible, although prognoses will have probabilistic character.

In this case decision of the task needs specific approaches. In particular, it is defined (Illyashenko S.M., 2010; Illyashenko S.N, 2010) an author, that at prognostication perspective directions scientifically technological development of domestic economy (knowledge, in relation to directions and prospects of realization strategy the innovative passing) it is expedient to apply combination of marketing prognoses , for the exposure the most credible tendencies of change consumer demand on different commodity markets, with the expert estimations of development SciTech status, for determination of possibilities embodiment present and perspective scientific and technical developments in new products, technology of their production and advancement at the market what would correspond the existent and perspective queries of users. For determination progress trends STP, world and national economy, author approach (Illyashenko S.M., 2010) is foreseen by application of positions theory recurrence of economical development (long waves of Kondrat'ev, cycles of Kitchin, Zhyugryar, Kuznec', others). It will allow to select and ground perspective in terms of commercial directions scientifically technological innovative development of Ukraine, rational taking into account present competitive edges states and world progress trends of science, technique, technologies, economy, social demographic terms, natural ecological, political legal others.

It is possible to forecast directions of development of existing and appearance of new scientific (applied), technical and professional knowledge an analogical method in concrete areas of activity. Flow-chart of algorithm of drafting prognoses and description of its procedures, including the analysis basic problems of prognostication and recommendation in relation to their overcoming is given author's study (Illyashenko S.M., 2010).

3.2. The revealing of needs in knowledge

For the exposure of requirements in knowledge of tangent certain areas or specific activity of separate enterprises and establishments it is expedient to apply the traditional methods of marketing researches with an amendment on the specific article of research. Existence of requirements in knowledge in certain subject area is possible to identify on the basis of analysis problems which complicate or slow its development. For example, in motor industry there is a problem of searching new power mediums, which would replace petrol, fuel-oil or gas, as natural supplies of raw material for their production are close. For its decision necessary knowledge are in relation to possibility the uses of engines, which use the alternative types of energy.

3.3. The search of industries application knowledge

Application of marketing of knowledge is most expedient in such *areas and spheres of activity*:

- education: an analysis of requirements in specialists of certain directions and specialties preparation; prognostication changes of necessities in relation to directions, specialties, manner and matter of preparation specialists; advancement of educational services to the market; providing of communication with users; ground market oriented price policy; strengthening market positions of concrete establishments of education, forming their image; analysis and forming competitive edges for advancement of domestic higher institutes to the world market educational services and others;
- science: determination of the most perspective directions of scientific researches; analysis competitive positions at the scientific services market; advancement of scientific developments and projects to the market; forming price policy on scientific developments; search of partners for researches implementation, adjusting, maintenance, and development mutually beneficial relationships with them (marketing of partner relations) and others;
- high-technology and capacious-knowledge areas of activity: computer and information technologies, gene engineering, optoelectronics, nanotechnology, medicine, engineering and (strategic and operative marketing of knowledge the which tasks are analogical to traditional with an amendment on the specific capacious-knowledge products and technologies);
- distribution among having a special purpose audiences (users of knowledge), and also wide layers of population the idea, that knowledge is basis proof socio-ecological-economical development, providing welfare every separate individual, family, collective, state on the whole, forming capacious-knowledge innovative culture;
- determination the best at the market standards and forming in accordance with it (benchmarking) the system market oriented management knowledge at the level of organization, settlement, region, states and others.

In accordance with the specific areas application marketing of knowledge it is possible to select some its varieties, their author systematization is given in table 1.

As ensues from a table. 1, the tool of marketing of knowledge integrates in itself the system of instruments few types of marketing. It follows to add the instruments of Internet marketing which gets all greater distribution practically in all spheres of human activity. It should be noted that in domestic practice application marketing of knowledge actually limitedly by areas of education and High-technology and capacious-knowledge areas of activity, in other spheres it practically isn't used.

Table 1. Marketing varieties which decide a task marketing of knowledges in different application domains

Basic application domains	Marketing varieties (Marketing, 2009)
Education	Marketing of education, Institutional marketing
Science	Marketing of scientific products, Marketing of innovations, Institutional marketing
High-technology and capacious-knowledge areas of activity	Marketing of innovations, Industrial marketing, Marketing of partnerships
Forming capacious-knowledge innovative culture	Institutional marketing, Marketing of ideas, Marketing of innovations
Determination the best standards of management knowledge	Benchmarking, Innovative marketing

Other four tasks (see higher) actually are the elements complex marketing of knowledge.

3.4. The marketing of knowledge complex

Orientation the system producing of knowledge on those their kinds, which use, whether will in a prospect have demand at the market (mainly, it touches the applied knowledge) is the analogical task of traditional marketing commodity policy. For the decision of this task the traditional tool of marketing can be applied: SWOT-analysis is at corporate level; methods of matrix analysis (matrix of BKG, McKinsey, – General Electric, others, more detailed see (Illyashenko S.M., 2008) – at the level of forming (modifications) the business-brief-case of knowledge (scientific, technical, professional); segmentation and positioning at the market – at the level of separate variety of knowledge (as an intellectual product, or product of intellectual activity).

For *forming prices on knowledge* marketing strategies of pricing can be applied analogical to those which are used for traditional products both innovative and those, that long time present at the market (Marketing, 2009).

For *forming and stimulation demand and advancement knowledge* at the market traditional approaches, and also newest marketing's communications, can be applied in an environment the Internet (Illyashenko S.M., 2011): E-mail advertising, electronic board of bulletins (BBS), context (searching) advertising, mediyna (banner) advertising, video (digital) advertising, base-line advertising, Rich of media, lidogeneration, sponson of sites, targeting, searching marketing (SEM), in thereby searching optimization (SEO), optimization of site, is under social networks, social media marketing, viral internet-marketing, direct response internet-marketing.

However in many cases expedient application of specific methods of advancement, which represent the features of knowledge as object of market exchange. In a table 2 are some such methods.

Table 2. Specific facilities communication advancement of different types the documented knowledge

Types of knowledge		Facilities of communication and advancement
Scientific, including	Fundamental	Scientific magazines, monographs, conferences, participation in international scientific projects
	Applied	Scientific magazines, monographs, conferences, participation in international scientific projects, exchanges (in thereby Internet exchanges) objects intellectual property, funds of patent document, exhibitions, informative letters, centers of scientific and technical information
Technical		Funds of patent document, centers of scientific and technical information, exchange (in thereby Internet exchanges) objects industrial property, organizations which are engaged in transfertom of technologies (for example, Ukrainian Aventures, American Philburg Technologies and others)
Professional		Making ratings of educational establishments (Shankhay, Webometrix ⁷ and others), participation in international educational programs (Tempus), reference books and sites of educational establishments and establishments of professional preparation, social networks, presentations, bringing in users to advancement, legislative regulation of level of qualification or periodicity of in-plant training, certification of specialists

Except for resulted in a table 2 such modern methods of advancement and distribution of knowledge are used: electronic encyclopedia and textbook of Wikipedia, repository and other electronic resources of the opened access (for example base of these scientific editions of DOAJ⁸), controlled from distance educational courses in

⁷ Ranking Web of World Universities: <http://www.webometrics.info/>

⁸ Directory of open access journals: <http://www.doaj.org/doaj?func=openurl&issn=22184511&genre=journal>

the opened access, specially created web-systems of research and educational establishments, for example Department of marketing and management of innovative activity Sumy state university^{9,10} and others.

Conclusions

Summarizing it follows to do next conclusions:

1. Offered author determination categories «knowledge» and «marketing of knowledge».
2. Specified composition of elements and offered author systematization of knowledge, defined relationship their separate kinds. Defined that the documented knowledge are, mainly, the object marketing of knowledge, in particular: scientific, professional, technical.
3. Outlined a role and task marketing of innovations on the modern stage of forming informative economy (economies of knowledge) both on a macrolevel (even states), and at level separate enterprises and establishments.
4. Defined areas and types of activity in which it is most expedient to apply marketing knowledge.
5. Shown by an author, that marketing of knowledge integrates in itself a few varieties of marketing. Defined marketing varieties which decide a task marketing of knowledge in different application areas.
6. Exposed the features application of known, and also specific instruments and methods for decision tasks marketing of innovations taking into account the specific of industries of activity.
7. Executed systematization the most widespread specific facilities of communication and advancement of different types the documented knowledge.

Results in aggregate deepen conceptual principles marketing of knowledge in part of account of features its application in relation to different areas of human activity.

Further researches should be aimed at improving methodical tool for determination existent and perspective requirements in new knowledge.

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Summary

Determined role and task marketing of knowledge's on macrolevel and separate organization level. Executed types of knowledge's systematization. Offered recommendation of areas for marketing of knowledge's application. Exposed application tool marketing of knowledge features with account of specific areas and types of activity.

Keywords: marketing of knowledge, structure of knowledge's, tool of marketing, producing of knowledge, advancement of knowledge, application of knowledge, management of knowledge.

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