

MOTIVATION OD INNOVATIVE ACTIVITY

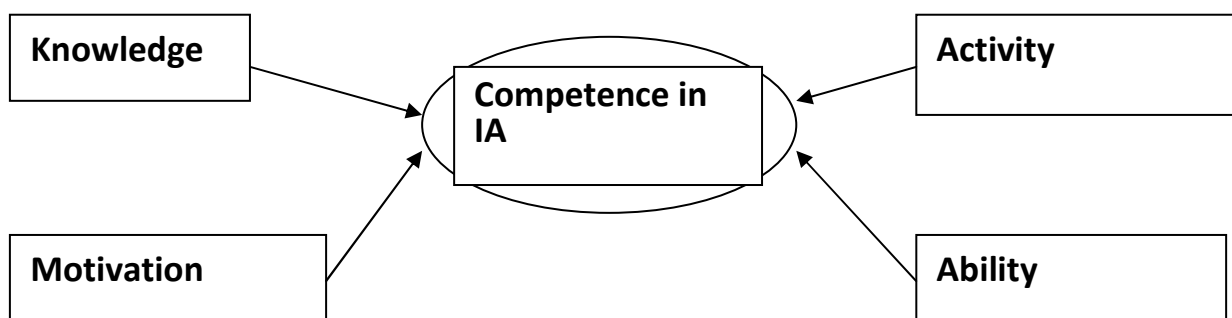
E.P. Grosheva, N.I. Naumkin

Federal State Budget educational Institution of Higher Professional Education
“Mordovian state institute of N.P. Ogarev”

Scientific-research area, are of intellectual property, production, marketing, and consumption are basic elements of a structure of innovative process.

Each of its components serves a specific function in the general process: generating innovative ideas, obtaining exclusive rights for a result of intellectual activity (emergence of non-material innovative product), producing material innovative product, its promoting on the market, realization of it in the area of productive or non-productive consumption.

Readiness of a subject of innovative activity to fulfill the mentioned functions is defined by components of competence in innovative activity that are formed within him: motivation, knowledge, activity, ability (picture 1).

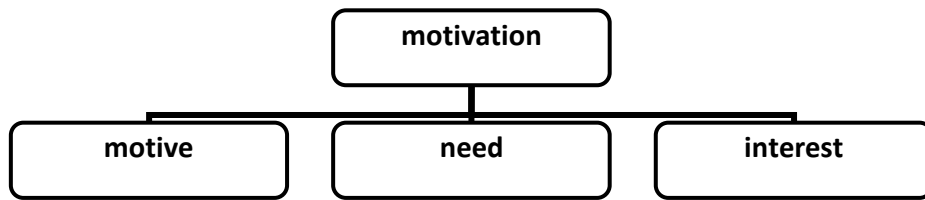


Picture 1. Components of competence in innovative activity

Social-psychologic aspect, called motivation, plays a determinant significance in innovative activity, as it plays a key part in overcoming psychologic inertness and innovative inertness of a subject of innovative activity.

Motivation of innovative activity, from our point of view [2, 3] is a totality of intensions that cause activity of a subject, production, or society in a certain direction.

As a totality of natural intentions we will study: a need that brings a subject into the state of activity; a motive that explains a reason of selecting directed behavior, activity, and interest that can be described by subjective emotions and behavior settings, values and ideals of society. We also need to pay attention to artificial, consciously-supported intentions for innovative activity that are called stimulus.



Picture 2. Components of motivation

A need as a state of shortage in something induces one to act in order to fulfill this shortage. All subjects of innovative system can suffer need: individuals, social groups, organizations, enterprises, institutions, society as a whole. A process of fulfilling needs is a purposeful activity, therefore, needs can serve as a source of a subject's activity.

A motive is an intention for innovative activity that meets a subject's needs. It is directed to improve one's own vital activity through transforming objects of reality. In this relation activity that transforms objective reality becomes necessary. Forming a motive for innovative activity is described by a continuous process of emergence and solution of antagonisms in developing technical systems, a process of improving artificial world.

Interest is rather a social quality of a subject that should be studied as an inductive mechanism of comprehension and activity that urges one to search knowledge in a certain area of reality, transform knowledge into new knowledge and transform the reality in accordance with his need and goals with it.

Motivation in the aspect of innovative activity should be studied as a necessary component of competence in innovative activity of a person who is ready to become an innovator and use results of his intellectual activity and manage it, thus improving his vital activity, as an element of the system of managing progressive alterations at all levels of society, as a source of intensification of innovative activity of all subjects of innovative system.

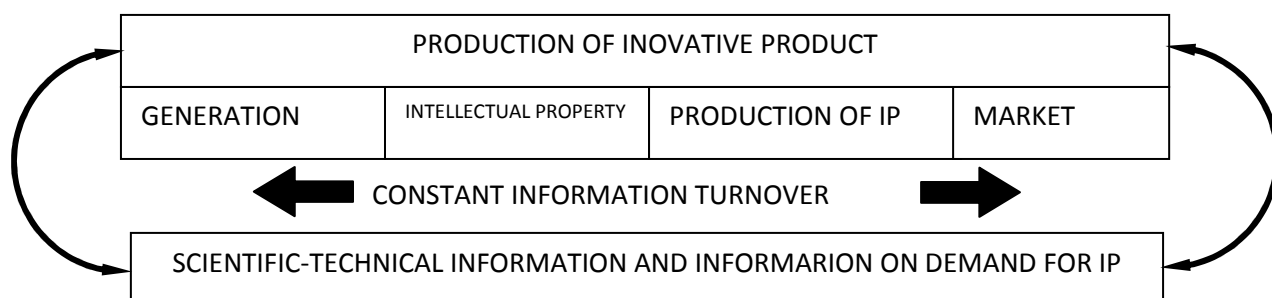
As a result of evolution of human society, interaction between an individual and material world goes mainly through technical means. Creative labour stands between needs of a social subject and their fulfillment. This labour is linked to discovering a new way to meet an urgent social need, progressive development of a person and his life conditions that provide for expression of a subject's abilities. Creativity is a level of a subject's development that implies reflection of acts, self-evaluation as a motive and condition of labour activity. Creative labour results in information, in other words, new knowledge, new ideas, their transformation into forms that provide for enrichment of spiritual life of society or managing a production, create new tools of labour and consumption objects. Results of creative labour represent a direct social utility. These results form national income.

Thus, discovering and comprehension of new need by a subject is a reason to carry out innovative activity. In innovative labour realization of potential an specific abilities transforms into objective social need from an individual intention. Through innovative activity a person obtains an ability to preserve and express its individuality, its further establishment and development. A goal, conditions, and abilities to express creative activity are predetermined by a dominating form of property in a state.

One of the basic necessary conditions of existence of enterprises in market economy is their competitiveness. It can be provided only by introducing innovations into productive turnover. Nowadays an enterprise and innovative activity form a single dyad. If an enterprise is not receptive to innovations, it will stagnate and collapse inevitably.

A promotion of scientific-technical information from innovative idea to a realized innovation takes place during the process of innovative activity. This process should be repeated continuously, thus fulfilling a need of an enterprise for providing its competitiveness.

For this reason an information on quality of a consumed product, its advantages and disadvantages, as well as information on need for it should be broadcasted to a subject of innovative activity (from a consumer of innovative product to its producer) (picture 3). Otherwise, innovative activity loses its purpose.

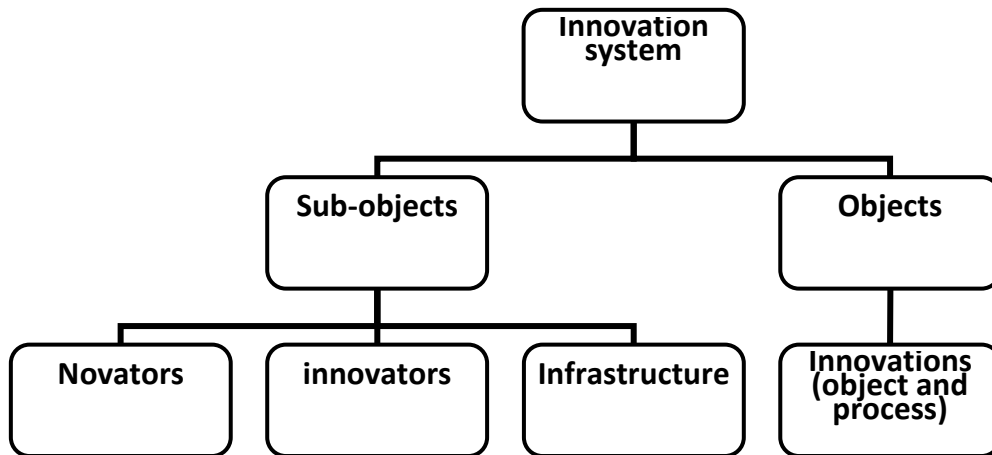


Picture 3. Scheme of constant information turnover between a consumer and producer of IP

Innovative process goes normally in case when scientific-technical information and information on demand for innovative product moves freely in the corresponding direction, when each stage of innovative activity corresponds to its purpose. Congruence of communications is achieved with enterprises that are included into an infrastructure of innovative system and research activity of producers (presence of divisions that are able to carry out conjuncture, marketing, patent research within an enterprise).

If there is a natural orientation for scientific-technical progress within a society, this society forms an innovative system as a totality of subjects (novators, innovators, infrastructure) and objects (innovations) that provides for innovative activity. Particularly, infrastructure of national innovative system should be generating, financing, and supporting innovative activity (educa-

tional institutions, scientific-research institutes, technoparks, business incubators, productive enterprises, venture funds, small and average business) [1].



Picture 4. Structure of innovative system.

Innovative system is a sub-system of social-economic system of a society. It defines a demand for innovative product and life ability of innovative process. However, an attention of a government towards formation of the very innovative system is an expression of an emerged need for innovations.

In terms of market economy social need for innovations is reflected as a solvent demand for it that is expressed on the market of intellectual property and technological market as indicators of demand for innovative products that establishes feedback between a consumer, producer-innovator, novator and demonstrates an immediate assimilation of innovations, in case high profit of using results of intellectual activity. Not only innovations, represented as a produced material product, but also non-material forms such as patents for unique technical and creative-construction solutions and other scientific-technical information can serve as an object of purchase.

In modern world, in terms of general globalization, a state is interested in developing innovative system. Its competitiveness on the world market is possible only through supply of science intensive products.

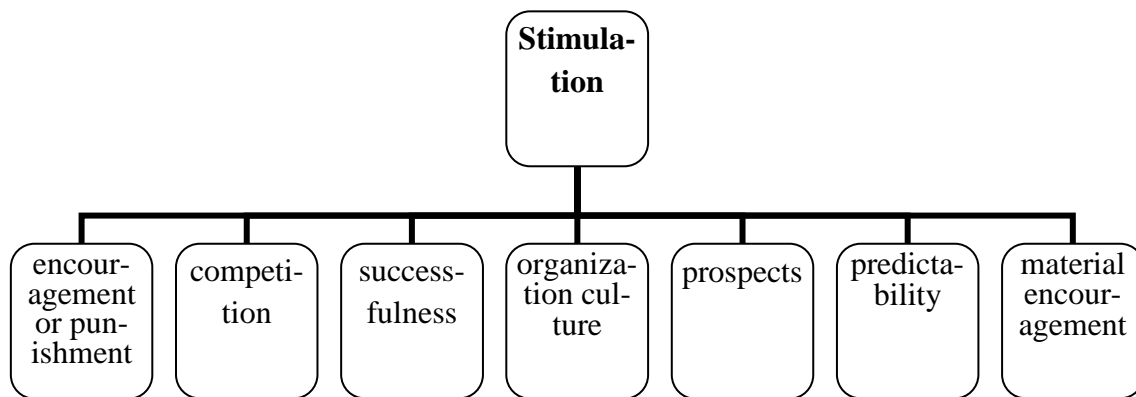
Thus, a need for innovations coming from production, state, society is the atmosphere in which actively functioning innovative system can exist.

A necessary condition of success of a developing innovative system is a mutual interest of all subjects, involved into the innovative process, in creation, producing, and distributing innovations. Unlike a need, interest expresses a subject's attitude to those who have created an object of need, possesses it, or has the same need for it. Interests represent relations, formed within

a society, that define distribution of means of fulfilling needs between social subjects. Interests urge one to change conditions of his vital activity, and, therefore, his subjective activity and social development as a whole.

In terms of market economy the basis of relations between economic subjects is formed of a desire of each of them to realize its own interests. As a result, motivation narrows to obtaining income. But, an income can be provided only through innovative activity that is directed to achieve a goal – commercializing innovations.

A need for a conscious impact over development of innovative activity is realized through stimulation. Different stimulus have an ability to strengthen energetics of motives: encouragement or punishment, competition, successfulness, organization culture within an enterprise, social significance, attraction of an interesting activity, prospects, predictability, material encouragement (picture 5). More often stimulation is studied as a consequence through processes of distributing products in relation to productive activity and defined through forms of receiving income via methods of paying for labour.



Picture 5. Methods of stimulating innovative activity.

Stimulation of activity can be called a motor of innovative process. Stimulating labour in terms of market economy meets different motivations of a businessman who receives income and a hired employee who receives wage. At first stages of innovative process, when fundamental and applied research take place, scientific workers, engineers, constructors become central figures. Their talent, abilities, and diligence define a birth of innovative idea. Both individual and legal person can be a generator of innovative idea. Anyway, they should be interested. Here motives are linked to creativity, in other words, interest in self-realization, the process of labour itself. Besides, they should be positive about their right for a worthy prize. Market mechanisms create economic premises for it.

The part of a capital's owner, entrepreneur, manager is to organize innovative process: legal introduction of innovations into business workflow, commercialization of innovative product, stimulating creative labour.

Motivation and stimulation of innovative activity are necessary regardless of organization structures within they flow. Enterprises interest employees with high wages, universities interest students with high grants, small business interest its employees with a corporate responsibility for a results that can make a high income.

Stimulation of innovative activity is a necessary condition of a successful innovative activity. There is no innovation without a novation.

Stimulating transfer of a technology (introducing an innovation into production via commercializing a product of scientific-technical activity) is an important component that provides for a continuity of innovative process. Competitive environment of market economy cause stimulus for production modernization, technical rearmament, management innovations, obtaining novations, production and realization of innovations. Attraction of novelties allows a businessman to produce a higher quality product and make income due to an increased mass of sold product, and also due to a new product that is more demanded. These factor bring a monopoly income to an entrepreneur.

So, studying innovative process as a system, we should research not only technologic process of creating innovative product from generating a novation to arranging its production, but also social, economic, and psychological factors that form an ability and a character of the production in specific terms of a specific society. Therefore, in order to create innovations, protect them, produce and distribute them, motivation of innovative activity is no less important than well-developed education, science, production that can adopt and reproduce an innovation, and a consumer of an innovative product.

Motivation for innovative activity forms as a resulting value of intensive forces coming from subjects of innovative subjects: inner intentions, motives (profit, safety, convenience, satisfaction, etc.), objective needs and interests, conscious interests and external stimulus that come from other social and economic subjects and environment as a whole.

1. N.I. Naumkina Method system of forming abilities for innovative engineering activity among students of technical institutions of education: monograph // N.I. Naumkina, ed. by P.V. Senin, L.V. Maslennikova, D.Y. Tamarchak; Moscow pedagogic state university, Saransk: Ed. office of Mordovian university, 2008, 172 p.
2. N.I. Naumkin Preparing students of national research universities for innovative activity during training technical creativity / N.I. Naumkin, E.P. Grosheva, V.F. Kupryashin; ed. by P.V. Senin, Y.L. Khotuntsev; Moscow pedagogic state university, Saransk: Ed. office of Mordovian university, 20010, 120 p.
3. N.I. Naumkin Preparing students of national research universities for innovative activity according to competence approach / N.I. Naumkin, E.P. Grosheva, N.N. Frolova // Integration of education, 2010, №4 (61), p. 28-33.