PATTERNS OF INNOVATIVE ECONOMIC DEVELOPMENT UNDER CONDITIONS OF MARKET RELATIONS

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Abstract. The purpose of innovative economic development is studying of methods and enforcement of its specific positions on the market by means of creation, mastering and commercialization of novelties in different branches of economics. The main tasks of innovative economic development are determination of tendencies of scientific and technological progress, determination of promising tendencies of innovative activities. The methodological basis of this research is organizational and structural simulation and the method of comparative analysis, general methods of strategic and day-to-day planning.

Keywords: innovative economic development, market relations, innovative activities, progress.

Introduction

Social and economic development of a society represents in itself a uniform continuous flow of historic events regularities of which are stipulated by the course of transformation of productive forces, heritage and succession of changes in productive relations. From the dialectical point of view, social and economic development is a natural process of transformation of modes of production of vital goods for a man which arise from each other and at the same time differ essentially by their content and also have their own individual equal increments. Modes of production are complex formations (super great systems) structural elements of which represent greatest assemblies of diverse scientifically and technological, economic, productive, cultural, political factors and relations.

The moving force of social and economic development is uncasing expansion of spiritual and material needs and demands of man. Results of social development in the long run tell upon well-being growth, degree of personal freedom, measure of self-realization of personal aspirations of every member of the society.

Yu.V. Sobolev, V.L. Dikan and others (Medynskiy and Samay, 2002) note that enterprises, while practicing innovative activities, concentrate on solution of principal problems relating to essentially new effective techniques, designing of necessary but up to date unknown gobs, methods of production organization, marketing etc.

According to V. Ruban, O. Chubukova, V. Nekrasov, arising of economic systems in itself, the sources of competition advantage of which get to be not natural, labor or financial resources, but the fruits of creative activities, i.e. innovation ideas, knowledge, techniques of their informational as well as material and energetic realization, is one of the main character features of the post-industrial period of the human civilization development.

Literally the word “innovation” means “novation” (introduction of something new). In that legislation of Ukraine the essence of innovation is determined as “anew created (applied) and (or) perfected competitive techniques, products or services as well as organizational and technical solutions of productive, administrative, commercial or other character that essentially improve structure and quality of production and (or) social sphere”.

The author adheres to the opinion that under conditions of the contemporary market relations influence of competitive factors on innovative processes is undoubtedly expanding and will be invariably expanding hence force. Though it should be noted that the market conception chiefly reflects the desired results of innovative activities the attainment of which is limited by technical and technological possibilities (dynamics of scientific and technological progress). Besides that, taking a decision as to that choice of innovations for realization of market possibilities is almost impossible to be separated from the bearer of these interests (innovator who is not a specialist-scientist) and his subjective ideas as to usefulness of innovations.
The enterprising conception of innovative development is based on the views of J. Schumpeter who regarded innovation as a certain new scientific and organizational combination of the latest productive factors that are motivated by enterprising spirit. So, M.I. Kruglov lays emphasis on considerable importance of enterprising motives for dynamics of innovative processes. According to him, rates of scientific and technological developments directly depend upon readiness of a productive system (enterprise) and its participants (owners and personnel) for acceptance of innovations. From this point of view M.I. Kruglov insists on existence of close connections between the motivating complex of innovative development and the corporate (incorporate) mechanism of self-financing. A.A. Peresada, A.B. Goncharov, A.F. Goyko and others also insist on the necessity to determine innovations as injection of investing capital into innovations that lead to quantitative or qualitative improvements of enterprising (productive) activities. However, that author considers that such approach is mainly based upon recognition of priority only of one (enterprising) group of motives that determine the dynamics of innovative development, whereas the motives of other participants of this process remain out of consideration of the researchers.

The social conception of innovations is determined by orientation on evaluation of integrated results of introduction of innovations (from the point of view of the society, state, enterpriser or other social groups interested in activities of the enterprise). So, Yu.V. Sobolev, V.L. Dikan and others (Medynskiy and Samay, 2002) contend that the conception of innovation may be applied as to any innovations in productive, commercial, financial, scientific research, marketing, managerial and other spheres as to any changes and improvements that guarantee social progress. By its meaning innovation is considered to directly contrary to conservatism which strives for preservation of the current state; innovation is always oriented on changes, modernization and improvement in any sphere of activities.

According to L. Maslovska, stability of economic development is to be secured through realization of constructive actions directed on technological transformation of productive forces and, as an inevitable consequence, on introduction of corresponding new world-outlook values. L. Maslovska insists also on the determinative character of influence of changes in production conditions and re-creation of material wealth (“technological way of production”) on transformation of any social phenomena.

Often enough the researchers propose also conceptions based on uniting the different approaches as to investigation of innovative development regularities. For example, in a number of literary sources the use of the process (process-result) approach for determination of innovation nature is recommended. Moreover, it is indicated that an innovation develops in time and has clearly pronounced stages, for an innovation it is natural to have both dynamic and static aspects. In the last case the innovation appears as the final result the scientific and productive cycle which (i.e. the result) has an in depended range of technological, economic, cultural and other problems. The innovation-result is proposed to be regarded taking into consideration the process of its introduction. Besides that, it is noted that for an innovation in general all possible relevant peculiarities - scientific and technological novelty, productive applicability, commercial profitability - are equally important. Absence of any of these features will surely knell upon the innovative process in a negative way.

The motive factor of innovative development appears to be the scientific and technological progress, i.e. uninterrupted expansion of scientific and technological knowledge, improvement of implements of production, forms and methods of production and labor organization.

**Results**

Innovative development of an enterprise represents an interruptible process of creation, conscious search, selection and introduction of a series of novations (innovations) in the spheres of technology, economics or organization of production and realization of products that are based on the use of up-to-date achievements of scientific and technological progress and may lead to qualitative rise of business activity efficiency of an enterprise, improvement of market positions or increase in social effect.

The specific content of the innovation in an enterprise consists in securing (assistance in realization) of qualitative changes of its activities.

The heterogeneous nature of the origin and diversity of innovations which form the basis of innovative activities stipulates formation of a complex classification system.

Typification of innovations allows to construct economic mechanisms and organizational forms of management depending on the type of innovations, to determine positions, forms of realization and promotion on the market that also will be unequal for different types of innovations.
Studying of the economic nature and composition of innovative development allows to come to the conclusion that the characteristic feature of this process consists first of all in the presence of clearly expressed cyclic regularities of realization of processes relating to arising, selecting, accepting, introducing and all possible expanding of innovations.

For the first time existence of the certain cyclic recurrence of economic development was shown by M.I.Tugan-Baranovskiy who carried out a fundamental analysis of the nature of “commercial and productive cycle”. According to this outstanding Ukrainian economist, cycling of industrial development is stipulated, first of all, by periodic accumulation and expansion of the fixed capital basis (pressure of free loan resources) and, as consequence, corresponding fluctuations of industrial investment volumes.

M.I.Baranovskiy and then A.Spithof noted that the initial motive factor of economic development is scientific and technological progress by means of which new possibilities for the use of free investment capital and borrowed funds arise in economy. However, realization of these possibilities, from their point of view, depends in a considerable measure on the state of subjective factors connected, first of all, with presence in the society of strata of persons with certain personal qualities and features of businessmen-innovators.

For the first time the role of a businessman as one of the most important factors of economic development was determined by J.Schumpeter who is considered to be the founder of the modern innovative (evolutional) theory of economic development. J.Schumpeter was almost the first who put a stress on the outstanding importance of individual peculiarities of the economic behavior of businessmen-innovators which is radically different from the model of productive activities of "conservative" managerial subjects or "simply owners". The main difference between a businessman-innovator and other subjects of management consists in the unconditionally positive attitude to the new, disposition and ability to select and introduce into production various kinds of novelties-innovations. From the point of view of J.Schumpeter processes of innovation selection and practical realization of these innovations in a considerable measure depend on amount of businessmen-innovators available in the society and personal qualities of these businessmen-innovators which are stipulated by their ability to overcome conservative and traditional concepts of “simple owners” and also to involve other, less initiative, businessmen into processes of innovative development (social and economic phenomenon which became known as “clusterization” of businessmen-innovators).

According to the author, the motive factor of innovative development is scientific and technikological progress, i.e. uninterruptable expansion of scientific and technological knowledge, improvement of labor objects, forms and methods of production and labor organization. Development of scientific and technological progress takes place in two main forms: evolutional (gradual and uninterruptible process of improvement of traditional technical means and technologies, accumulation of these modernizations) and revolutionary (uprising of a revolutionary situation for achievement of a qualitatively new, higher social labor productivity and realization of qualitative changes in the material and technical basis of production). The evolutional form of scientific and technological progress as a rule is a source of uprising of explicit knowledge (EK), use of which assure constant rise of economic results of production (especially on the initial stages of the innovative process). The revolutionary form of scientific and technological progress is based on accumulation of a critical mass of technological news that, from one side, is already not sufficiently effective (from the point of view of securing an income acceptable for a businessman-innovator) and from the other creates a necessary basis for principal transformation of productive forces. The revolutionary form of scientific and technological progress lads to expansion of implicit knowledge (IK) that, from one side, allows the scientists (through the change of their world outlook) to come to new fundamental conclusions as to the nature of investigated phenomena and, from the other, creates pre-conditions for acceptation by businessmen of a number of radical novelties based on re-interpreting of the traditional technologies and production modes.

The other primary factor of innovative changes appears to be outcome productive possibilities of an enterprise, implementation of which is the productive and technological basis (PTB) of an enterprise, i.e. the existing complex of productive operations for re-transformation of labor objects on the basis of the use of certain technological knowledge and practical skills of workers (accumulated explicit and implicit knowledge).

Development of scientific and technological progress exerts double influence on the productive and technological basis of an enterprise: an interruptible cumulative development leads to gradual creation and introduction of improving innovations; jump-like qualitative form a number of possibilities as to realization of
cardinal basic innovations. Thus, the process of innovative development is steadfast and uninterruptable, though speed and intensity of its course depends directly on the state of investment and innovation transformations, and namely this stipulates possible non-linearities of innovative transformations. Introduction of innovations is rather an expensive and risky process, so taking a decision as to selection of innovations is directly dependent on a corresponding compound motivating complex (MK) of the investment capital owners who take on themselves the majority of risks. MK is divided into two main elements: complex of motives of portfolio investors (foreign crediting of an innovative process) and complex of motives of businessmen (internal self-financing of development.

In the first case the decision as to feasibility of financing (i.e. introduction) of innovations is taken in accordance with the subjective notion of a potential investor as to comparative profitability of investments, estimation of which is carried out taking into consideration of alternative profitability, risks of investments, level of financial market competition, subjective expectations of investors. In the final result the integral reason that reflects the state of this factor becomes the so-called "pressure" of free investment capital that is available on the financial market and is to be allocated for securing an acceptable profit level for its owners. Taking of innovative decisions by a businessman in a great degree is based on individual qualities of a businessman-innovator's person (strength of character, ability to take risks, intuition, resolution etc.) whose peculiar features often stipulate the choice of concrete variants of innovative process. Of no small importance for innovation processes is also ability of a businessman to secure readiness of internal medium of an enterprise to adopt innovations as well as by the personal example to “captivate” other less qualified businessmen, to instigate them for expansion of certain innovations (“clustering of innovators”).

The result of complex unification-combination of the determined factors is selection by an enterprise of a certain variant of development of market possibilities for rising of competiveness of an enterprise: through expansion and enhancement of productivity of the existing productive capacities; through creation of new more effective productive capacities for output of product of the existing assortment; through creation of new productive capacities for output of new products. The consequences of realization of such possibilities consist in different scopes of sale market of the enterprise (from the least in the first variant to the most in the latter). Expansion of sale market and, as consequence, rising of the producer's profits is the most important final (aimed-on) motivating factor of innovative development. Such increasing, from one side, is a source of reward for the efforts of investors and compensation for the risks taken by them and, from the other side, favor the formation of more optimistic idea about expedience of the next investment into innovative development. Besides that, expansion of the sale market creates considerable possibilities for exposure and comprehension by the market participants of the facts of existence of new, just arises, needs in new products and innovatory more perfect technologies of production.

It should also be paid attention to the external institutional factors of innovation process (the state of the social and cultural medium and the state regulation of innovation and investment activities) that exert an indirect (but very great) influence on the dynamics of innovation introduction.

Thus, from the point of view of the author, the main factors that stipulate the dynamics of innovation processes (generation, selection and introduction of innovations) in an enterprise are, first of all, the following:

1) Scientific and technological progress that finds its realization in formation and development of the productive and technological basis of an enterprise;

2) Market possibilities for competiveness rising, the use of which gives an access for subjects of management to competitive advantages over other participants of the market.

The main criterion of progressiveness of the productive and technological basis of an enterprise is considered to be the stage of “technological rationality” of the productive process, i.e. the measure of acquaintance of workers with the cause-and-effect connection between necessary incomes of the productive system and the desired results of its activities. The main factors of evaluation of progressiveness of productive and technological basis of an enterprise are as follows: the degree of variability of productive tasks, structuring and determination of the problems of technical and technological development of an enterprise: type of the dominating process on this enterprise, stage of mastering of the technology that is used in production, degree of specialization and mutual dependence of the productive association, repeatability and comparability of productive operations, forms and methods of production organization which are mostly used.
The productive and technological basis is the strictest formalized basis of innovative development of an enterprise. So, the notion “technology” in modern researches as to regularities of innovative processes is used rather widely, because the same ability of an enterprise for purposeful transformation of its productive basis in many cases underlies determination of the main characteristics and peculiarities of the technology. Along with that one may separate two main approaches to solution of this problem: some researchers concentrate their attention on self-development of technology when spheres of knowledge accessible to the scientists and society change, and others connect technological changeability with changes in market demand.

On the stage of maturity a stable technology may develop into a fruitful one. With the fruitful technology its basis remains for a prolonged period accompanied by development of products with better characteristics and wider range of application. Development of new kinds of production becomes the decisive factor of economic success. In the result enterprises get into the conditions of constant necessity of innovations. Transitory technology is characterized by appearance of basic technologies that replant one the other in the course of one period of demand life cycle. A change of technology has a deeper effect than appearance of new products because it is fraught with moral aging for all investments made into the previous technology (personnel knowledge, production assets).

Analysis of the modern tendencies of scientific and technological progress testifies to a considerable rise of the degree of changeability of technologies. Now any historically stable branch may nearly instantly turn into changing one owing to intrusion of adjacent technologies. Such a transformation is most dangerous on the stage of maturity of the demand life cycle. Besides that, the modern conditions of management are characterized by acceleration of production processes, shortening of terms of new products launching, necessity of new products output of individualized products according to consumers’ demands in small production lots striving for high quality with reduction of costs. Rise in requirements as to velocity of execution of orders and level of their diversity requires increasing the degree of individualization of products and level of production flexibility. In the greatest measure the influence of the factors mentioned is characteristic for high technology branches, such as machine-building.

Thus the problems of switch to a new technology for an enterprise are connected with promptitude of getting aware of need in changes and securing the genetic consequence of technologies. Mistakes in the course of this process may lead an enterprise to loosing of market positions and even to changing of the sphere of economic activities. From this point of view, special actuality gets to pertain to the necessity of all-round co-ordination of innovative decisions that are taken at the enterprise with the objective requirements which are stipulated by the character and tendencies of its productive and technological basis chances.

Compatibility of an enterprise in under the market conditions is a reflection of the fact that the enterprise has relative advantages over other participants of the market (competitors) in the spheres that are connected with the key factors of competition or stipulate the objective possibilities of this enterprise and its rivals as to achievement of certain similar aims.

Competitive rivalry is an integral component of the market mechanism functioning, important condition of persistent rise of productive activity efficiency under market conditions. Competition comes out as the most important mechanism for securing of efficiency, proportionality and dynamics of market economy.

The level of market competition and degree of the market compatibility in general instigate an enterprise to search new form and ways of competitive struggle waging, substation rising of effectiveness of production and marketing activities. As a complex, realization of the above-mentioned methods determines the character of origin and value of competitive advantages and compatibility of an enterprise in general.

According to A.A.Chukhno, the market mechanism (market) first of all forces an active competition between enterprises-producers that makes them to reduce individual production expenses even to the level lower than socially needed expenditures. Thus, the competitive market relations become the main sphere of manifestation of the law of value according to which economy is to have a material (production of use value corresponds to the demand structure) and financial and monetary (correspondence of the sum of values, i.e. aggregate product prices and volumes of effective demand) economic development balancing.

The main sign of a level of the market compatibility is its concrete structure, i.e. such interrelations of the market participants and connections between them that stipulate a certain degree of market compatibility intensity. Us a rule the four principal possibilities of competitive structures of the market are marked out: completed competition, monopoly, monopoly competition, and oligopoly. The nature of origin and regularities of transformation of the competitive marker structure are stipulated in the first turn by
characteristic peculiarities of consumer demands for satisfaction of which products and services are proposed on the market. In its turn, differentiation of consumer demands and conditions of market rivalry under different competitive structures of the market directly affect on regularities of innovative processes in an enterprise.

The competitive structure of the market of completed compatibility is determined by great number of market exchange of products and services, absence of substantial hindrances (“way-in and way-out barriers”) for entering or withdrawal from the market relations.

An uprising of the situation of completed competition, as a rule, is stipulated by an insignificant level of differentiation of consumption demands of buyers and, as consequence, according to low diversities of consumer (technical, constructive, economic, aesthetical and other) characteristics of products and services that are proposed on that market. The main competitive advantage of an enterprise, under conditions of perfect competition gets out a low price level which is guaranteed by correspondently low level of expenses for manufacturing of products (focusing on expenses). Reduction of expenses for manufacturing of products is carried out through the use of rather simple production technologies. Possibilities for segmentation of the market by means of determination of deep characteristics of consumer demands with perfect competition of the producer are almost non-existent.

Under such conditions the main direction of innovative development of an enterprise consists in determination and realization of reserves to raise productive activity effectively, reduction of expenditures in the sphere of production and product marketing. Though innovations of perfect market participants more often will have a current character as far as realization of product sales by every one of the participants will be irrelevant. Besides that, the enterprisers-productions will uninterruptedly carry out research of possibilities to escape too acute competition by means of market offer segmentation on the basis of bringing to light the specific aspects of consumer demands of buyers and corresponding rise in diversity of peculiarities of products and services that are made (separation or even creation of a separate market segment). Objectives and priorities of innovative development for participants of the perfect competition market almost will not differ.

Under conditions of the monopolistic competitive structure of the market one of participants of the market relations (producer or consumer) enjoys almost unlimited possibilities as to exert influence on the conditions of product salving. Along with this in the market exchange even great number of other producers or buyers, whose activities, though, will almost not affect the tendencies of market relation changes, may also take part.

The purpose of innovative process for a monopolist is rising of “entrance barriers” for other participants and securing the stability of competitive advantages that guarantee the monopolistic state. As a rule, achievement of such purpose is carried out through creation of artificial obstacles as to participation of other enterprises in the market exchange (current fictitious innovations). The innovative activity priorities of market outsiders will, on the contrary, be connected with the search of possibilities as to reducing the above-mentioned barriers and detriment of the leader's monopolistic position on the market. Realization of these priorities requires creation strategically innovations that lead to substation transformations of consumer demand satisfaction, i.e., as a matter of fact, to emergence of new competitive advantages which up to this time have not existed or had the principal significance.

The oligopolistic competition structure of the market is connected with acute rivalry between the limited number (not more than seven-eight) participants that occupy the relatively similar market positions. The high acuteness of competition (that naturally has a value character) on the oligopolistic market is stipulated by the two main circumstances. Firstly, the possibilities (the same as on the market of completed completion) as to diffraction of products and services that are proposed on the market are rather insignificant due to correspondingly low level of diversity of corresponding consumer demands. Secondly, as distinct from the conditions of completed competition, the oligopolists (through the rather considerable parts of the marker that belong to them) are capable to use the scale effect, i.e. even insignificant rise in volume of sales by the oligopolies (even under lowering of the current price level) will usually lead to profit increase. With the high level of elasticity of the demand for price that is inherent to the oligopolistic market the main factor of formation of the competitive advantages of its participants becomes low expenditures that determine possibilities for realization of flexible price policy and, as consequence, corresponding increase in volumes of product sales.
Under such circumstances the priorities of innovative activities of the enterprises-oligopolies will be almost similar: active unification of current marketing and economic innovations (directed on expansion of sales of the products (that are already manufactured) and strategically technological liberations of strategically character (for creation of new products or radical improvement of the products that are already manufactured).

Discussion

The most wide possibilities for impetuous innovative development connected with radical changes in assortment of goods of an enterprise arise under conditions o monopolistically (uncompleted) competition. The characteristic feature of this competitive structure of the market consists in the fact that individual subjects of the market relations have attributes of monopolistic power the source of which appear to be diversity of consumer advantages of the buyers. In the situation of monopolistic competition a great number of enterprises may function on condition of free entrance-exit, i.e. the level of competition may by rather high. However (the sign characteristic of a monopoly) all enterprises of the branch, as a consequence of considerable differentiation of products, will have at their disposal certain possibilities of influence on price of the product manufactured by them according to significant distinctions of this product in comparison with the rivals. Extend of this power is limited by presence of other manufacturers of analogous products and considerable entrance of entry to the branch. So from the point of view of formation competitive advantages and securing of competitive position for a producer under monopolistic competition conditions the exceptional importance gets to belong to introduction of product innovations that in the greatest measure would reflect the existing (even the most minute) specific aspects of the consumer demands in different segments of the market. Securing of such specific requirements through creation of corresponding products and services will promote enforcement competitive positions of an enterprise due to two circumstances: firstly, successive specialization in satisfying the consumer demands stimulate increase of monopolistic power of the enterprise in the limits of the corresponding segment of the market; secondly, rise of the specialization level will lead to reduction of the number of direct rivals and, as consequence, to reduction of competitive rivalry acuteness. Thus, one should make a conclusion about the exceptional influence of the technological and market competition factors on determination of directions and intensity of innovative process realization on the enterprise. Besides that, studying of the innovative process laws under conditions of the market relations allows to rise of efficiency of the innovative and investment activities of an enterprise on the basis accurate determination the objectives and priorities of generation, selection and implementation of innovations.

References