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**INNOVATIVE DEVELOPMENT AND FACTORS AFFECTING THE
INNOVATIVE ACTIVITY OF INDUSTRIAL ENTERPRISES IN BULGARIA**

Sotirova Asya Olegova

*PhD Candidate of Management and Marketing Department,
South-West University, Blagoevgrad, Bulgaria*

Innovations are a necessity, innovations are a factor, innovations are the moving force of the companies in the 21st century. Every modern manager should recognize the role of innovations for the existence of the enterprises and to aim at innovative development. The novelties in various areas are to be followed up. It is necessary to look for the options and to overcome the obstacles standing in the way of innovations.

The major objective of this article is to establish the state of innovative activity of industrial enterprises in Bulgaria and to identify the factors exercising the largest influence on their innovative development. The major results to be achieved are the establishment of the basic internal and external factors that support innovations, the deduction of the major problems occurring during the innovation process and the establishment of some directives to activation. The major methods of study used in this work are statistical methods for evaluation, method of analysis and synthesis, method of comparison. Information of literature sources has been studied and systematized within the process of research, as well as analytical reports of Bulgaria and the European Union, and results from an inquiry held are used, as well as statistical data of the National Statistical Institute of the Republic of Bulgaria.

Keywords: *innovations, innovative development, innovative activity, factors influencing the innovative activity.*

Introduction. The new economic situation characterized by the growing dynamics of the economic environment and enhanced influence of market on the business activities requires from the enterprises to generate and adopt more and more competitive novelties, to maintain and develop a high level of innovative activity. This becomes a condition of greater and greater importance for their efficient functioning and for their survival. According to Kalaidjieva (Kalaidjieva, 2013, p. 40-41) „nowadays the innovations are a factor that is more important for economic growth than the traditional factors – land, labor, investment resources“ and the innovative activity of the companies

is of an important significance due to the „need for the provision of a high growth and development of high-tech branches and other knowledge-based services.“ The innovations are also among the major methods for overcoming the crisis phenomena in the enterprise. (Filipova, 2009, p. 104)

Each enterprise needs the provision of conditions for the introduction of innovations and therefore they have such structure and processes which bring to the implementation of the appropriate innovative behavior.

The innovative behavior of a company depends on multiple factors. The major prerequisites for the development of innovativeness in the industry are: access to financing and internationalization; activity with regard to intellectual property; implementation of good practices in the companies' businesses, including the development of human resources, the use of information and communication technologies and the established practices in business planning and preparation of marketing strategies.

In the circumstances of an accelerated global change and development of technology the correct formulation of innovation strategies and policy plays a particularly significant role. The identification of the main barriers to innovations is an important element in this process.

The major objective of this article is to establish the state of innovative activity of industrial enterprises in Bulgaria and to identify the factors exercising the largest influence on their innovative development.

Methodology of the study

The study is carried out during the first quarter of year 2016 in 85 enterprises operating on the territory of the Republic of Bulgaria. All of them make business in the area of industry and they are of various sizes. The study establishes the percentage of the Bulgarian industrial enterprises that can be defined as innovative, the types of innovations they implement, the cost of innovative activities, the income received from the new products, the difficulties they encounter at the implementation of their innovation policy and the stimuli they have for the introduction of novelties.

Representatives of the management bodies of the respective companies were interviewed. A direct method of data collection was used – filling in questionnaire cards. The results of the study are based on the respondents' personal opinions.

Statistical methods were used to process the information gathered – grouping method, analysis method, graphical method, computation of relative values. Data provided by the National Statistical Institute were used for more precise diagnostics, as well as results from analytical reports of Bulgaria and of the European Union.

In this work the unified classification of business activities adopted by the European Union is used, according to which the sector of industry is comprised of extractive industry, processing industry, generation of electrical and heating power [20] and the classification used by the National Statistical Institute according to which industry is comprised of the following sectors: extractive industry, processing industry, generation and distribution of electrical and heating power and gaseous fuels; water-supply; sewage services; refuse management and recovery (Business statistics, Multi-branch statistics, www.nsi.bg).

Literature review

In historical terms the issues of innovations were put as early as the 18th c. when the French educationist Jean de Condorcet (1743-1794) brought the attention to the interrelation between science and industry. And again in the 18th c. Adam Smith (1776), studying the problem of division of labor in his work „The Wealth of Nations“, revealed the role of machinery invention for the increase of productivity of labor (Smith, 2010, p. 15-18), as well as the role of new territories or opening of new branches of industry for the increase of return on invested capital (Smith, 2010, p. 96).

Later on, at the beginning of the 19th c. (1803) Jean-Baptiste Say studied the issues of innovation in relation with entrepreneurship. In the French economist's conception ideas of the

innovative functions of the entrepreneurs appeared for the first time (Say, J.-B., "A Treatise on Political Economy", <http://finfree.narod.ru/jan.htm>). In year 1817 the English economist David Ricardo linked the innovation process to the financial outcomes noting that "He, indeed, who made the discovery of the machine, or who first usefully applied it, would enjoy an additional advantage, by making great profits for a time" (Ricardo, D., *On the Principles of Political Economy and Taxation*, <http://books.efaculty.kiev.ua/isekvc/10/>). The position of Karl Marx (1867) was analogical, he also revealed the relation between the innovativeness of entrepreneurs and the implementation of more elaborate machines and production methods on the one hand, and entrepreneur's profit on the other. He introduced the concept of "added surplus value" with regard to the innovative entrepreneurs who receive entrepreneur's profit for the introduced improvements and innovations (Marx, 1988, p.356). When studying the issues related to innovations, there are grounds to give merits to the contribution of the English economist Alfred Marshall. According to him "the entrepreneur is an innovator who creates new products and applies different combinations of production factors by replacing one combination with others in order to increase the efficiency of production" (Marshall, 1984, p. 27; 370).

At the beginning of the 20th c. the issue of innovations found the clearest reflections in the works of Joseph Schumpeter. He introduced innovation as an economic concept at a company level and defined its contents as a change related to the following (Schumpeter, 1934, p.66):

- introduction of a new product or a product not known to the consumer, or a qualitative change of an existing product;
- introduction of a new production method that has not been experimented in the respective branch, is not obligatorily based on a new scientific discovery and may constitute a new manner of business application of a given commodity;
- acquisition of a new market, i.e. a market at which a given production branch has not entered in the particular country, or this market has not existed before;
- obtaining new sources of raw materials or intermediate products no matter if they have existed without being noticed or if they have been considered inaccessible or if they had to be created;
- building a new organization in the industry – a monopolistic position (trust, for example), or destruction of a monopolistic position of some other enterprise.

During the second half of the 20th c. and nowadays (at the beginning of the 21st c.) the issues of innovation, innovativeness and innovative development make a significant part of the theoretical studies of numerous scholars. Positions concerning these issues may be found in the works of I. Kirzner (Kirzner, 2010), M. Casson (Casson, 1998), P. Kotler (Kotler, 1991), P. Drucker (Drucker, 2002), M. Porter (Porter, 2004), W. Pride (Pride, 1994) and many others.

The new innovation theory studies the process of creation and diffusion of knowledge. The basis of such studies is the so-called Chain-linked method created by Rosenberg. He studies innovations as an interactive process (Ruseva, 2002). The stress is put on the links – direct and reverse – between all the agents in the innovation process and the interconnectivity between the individual agents in it. The model of the chain and links puts the emphasis on the interconnectivity between the scientific and the technological basis (Karolova, 2003, p. 11).

Apart from the definitions given by the scholars studying the issues of innovations, there are also definitions given by various bodies and institutions taking a particular place and positions in the innovation processes. For example, the definition of innovation introduced by the Organization of Economic Cooperation and Development (OECD) and the European Commission (EC) in the directive on collecting and interpreting the innovation data states that the "innovation is the introduction of a new or significantly improved product (good or service), or process, a new

marketing method or a new organizational method in the business practices, organization of work place or external links“ (Oslo Manual, 3rd edition, Guidelines for collecting and interpreting innovation data, 2005). It is obvious that this definition covers a large scope of possible innovations.

The research of innovations and innovation processes is of a particular interest for many scholars, specialists and practical workers. Innovation activity cannot be studied separately from all the other processes both at a macroeconomic and at a microeconomic level. Many factors of the enterprises’ internal and external environment exercise influence on their innovation activity and they may be classified based on various signs. T. Karolova (Karolova, 2003, p. 21) and L. Varamozov (Varamozov, 2013, p.50) divide the factors into the following four groups: technical-economic; legal-regulatory; organization-managerial; social-psychological. Their outlooks of these factors influence on the innovative development of the enterprises are structured in Table 1.

Table 1. Factors influencing the innovative activity of the companies

| Groups of factors | Stimulating influence | Obstructing influence |
|--------------------------------------|--|--|
| I. Technical-economic factors | <ul style="list-style-type: none"> - Availability of material-technical and financial potential; - Stimulation of innovation activity; - Orientation to the use of the newest technological achievements | <ul style="list-style-type: none"> - Insufficiently developed technical base and potential; - Insufficiency of financial resources and financing of risk projects; - Predominance of the interests to the current production. |
| II. Legal-regulatory factors | <ul style="list-style-type: none"> - Legislative measures for preferences and stimulation of innovation activity | <ul style="list-style-type: none"> - Restrictions of or indifference to tax, patent-licensing and anti-monopoly legislation. |
| III. Organization-managerial factors | <ul style="list-style-type: none"> - Suitable and flexible organization-managerial structures; - Democratic style of management; - Decentralization, autonomy, establishment of problem groups, team organization, etc. - Disciplinary approach to team work; - Voluntariness of participation; - Appropriate system of remuneration; - Support by the part of the higher management. | <ul style="list-style-type: none"> - Conservatism of organizational structures; - Unnecessary centralization; - Departmental reticence; - Orientation to short-term return from innovations. |
| IV. Social-psychological factors | <ul style="list-style-type: none"> - Providing conditions for self-actualization and creativity; - Moral stimuli; - Social recognition, etc.; - Tolerant approach to failures; - Benevolent attitude to new ideas, trials and mistakes | <ul style="list-style-type: none"> - Resistance to changes; - Fear from uncertainty and failure; - Big financial risk. |

Source: Adapted after T. Karolova (Karolova, 2003) and L. Varamozov (Varamozov, 2013)

In our opinion the factors influencing the innovation activity can be divided in three groups: factors blocking innovations; factors supporting innovations and factors enhancing innovation activity.

The following belong to the group of blocking factors: managers’ distrust for the new ideas from “below”; the new ideas requiring too much coordination; interference of other departments into the evaluation of innovative proposals; criticism and fear of dismissal for mistakes; control on

every step of the innovator; the syndrome of “all-knowing experts” acquired by the superior managers.

The group of innovation-supporting factors covers: giving freedom for the development of novelties; providing the innovators with the necessary resources and equipment; support by the part of the higher management; holding discussions and exchanging ideas; maintaining efficient communications with colleagues, other units of the company, universities and external research organizations.

We believe that the following factors enhance innovativeness: support for the workers’ aspiration to continuous training and improvement of qualifications; provision of possibilities to express one’s own opinion for the implemented changes; fostering employees to hold several jobs; overcoming the barriers between the various types of jobs and the functional responsibilities; provision of business information rich in content; holding regular meetings of the work groups; logical argumentation of the need for changes and re-organization, maintaining a climate of trust and open-mindedness to changes.

Results

According to the annual report of innovations in the EU Regional Innovation Scoreboard 2014 (Regional Innovation Scoreboard 2014, <http://bookshop.europa.eu/en/regional-innovation-scoreboard-2014-pbNBBC14001/>) Bulgaria is in the group of countries that are poor innovators. The evaluations in this report are based on indicators related to the innovations at the level of regions. These are indicators of the level of public expenses for scientific & research activities, business expenses for scientific & research activities, cooperation between innovative small and medium enterprises, technological innovations (products and processes), non-technological innovations (marketing and organizational) and others. The index of every indicator is measured from 0 to 1, 0 and 1 establishing respectively the worst and the highest values of the indicator.

The following table /Table 2/ shows that Bulgaria takes critically low positions by many of the indicators. We are below the EU average level in all the indicators. The expenditure on scientific & research activities is very small and the number of the implemented innovations is small, too.

Table 2. Innovation development indexes

| Innovation development indexes | North and East Bulgaria | Southwest and South central Bulgaria |
|---|-------------------------|--------------------------------------|
| Share of population having university degree | 0.31 | 0.41 |
| Public expenses for scientific & research activity | 0.08 | 0.27 |
| Business expenses for scientific & research activity | 0.09 | 0.26 |
| Innovation expenses other than for scientific & research activities | 0.24 | 0.16 |
| SME performing internal innovations | 0.15 | 0.09 |
| Cooperation between the innovative SME | 0.08 | 0.11 |
| Patents | 0.05 | 0.08 |
| Technological innovations (products and processes) | 0.18 | 0.12 |
| Non-technological innovations (marketing and organizational) | 0.06 | 0.07 |
| Employment in medium- and high-tech productions | 0.34 | 0.40 |
| Sales of products that are new to the market or to the company | 0.31 | 0.27 |

Source: Regional Innovation Scoreboard 2014 and author’s calculations

Based on the methodology used by the National Statistical Institute (in accordance with the requirements of Eurostat) the major indicators through which the level of innovation activity is

measured and the characteristics of the innovation activity implemented may be divided into the following directions: innovative enterprises; expenses for innovation activity; outcomes from innovation activity; innovation cooperation; sources of information on innovations.

The most recent data /Table 3/ of the National Statistical Institute /NSI/ of the Republic of Bulgaria show that only a small number of Bulgarian enterprises have innovative development. In spite of that there is a trend of increase of the share of the innovative companies – in general for the economy and in particular for the industry.

Table 3. Share of innovative enterprises in the total number of the enterprises

| Year | Innovative enterprises /total/ | Innovative enterprises in the industry |
|------|--------------------------------|--|
| 2006 | 20,2 % | 23,8 % |
| 2008 | 23,9 % | 29,2 % |
| 2010 | 27,1 % | 31,1 % |
| 2012 | 27,4 % | 31,0 % |

Source: NSI and author's calculations

Table 4. Share of the enterprises selling new or improved products, new for the market, in the total number of enterprises

| Year | Total enterprises | In the industry |
|------|-------------------|-----------------|
| 2006 | 8,3 % | 10,0 % |
| 2008 | 6,2 % | 7,2 % |
| 2010 | 5,3 % | 5,8 % |
| 2012 | 5,3 % | 6,0 % |

Source: NSI and author's calculations

Table 4 proves that the number of enterprises selling product innovations which are new to the market tend to decrease.

The R&D expenses in the processing industry have increased more than twice for the period 2010 – 2014 /from 33 087 thousands of BGN in year 2010 up to 76 901 thousands of BGN in year 2014/. The bigger the company is the larger its resources for own R&D are. For example as per data of the NSI for year 2014 the companies with employed staff of 250-499 persons spent 242 075 thousands of BGN on R&D, while those with employed staff of 50-249 persons - 73 056 thousands of BGN.

The share of the turnover from the sales of new or improved products that are new to the company but not to the market in the total turnover of the company is shown in Table 5, the share of the turnover from the sales of new or improved products that are new to the market in the total turnover of the companies is seen in Table 6, the data being taken from the NSI.

Table 5. Share of the turnover from sales of new or improved products – new to the company but not to the market – in the total turnover of the enterprises

| Year | All the enterprises | Industrial enterprises |
|------|---------------------|------------------------|
| 2006 | 3,6 % | 2,8 % |
| 2008 | 6,4 % | 6,0 % |
| 2010 | 3,7 % | 5,4 % |
| 2012 | 2,4 % | 3,3 % |

Source: NSI and author's calculations

Table 6. Share of the turnover from sales of new or improved products – new to the market - in the total turnover of the enterprises

| Year | All the enterprises | Industrial enterprises |
|------|---------------------|------------------------|
| 2006 | 6,7 % | 11,1 % |
| 2008 | 7,8 % | 13,1 % |
| 2010 | 3,9 % | 5,3 % |
| 2012 | 1,8 % | 2,2 % |

Source: NSI and author's calculations

The data show that the proceeds from the new products introduced are very small and the trend is negative, the share of the turnover from sales of new or improved products, new for the company or for the market, in the total turnover of the company is decreasing.

Innovations are a complex set of scientific-technical, economic, environmental and social parameters. The versatility of their aspects brings to the existence of a large number of classifications.

Innovations may be classified based on an extremely large number of symptoms: class of satisfied needs; type of saved resources (capital, labor); components of the production system to which the innovation refers (product, process, organization, equipment, work force, etc.); type of required knowledge; type of technological changes (new, improved or existing technologies); required share of the activities in research and development; company's size; achieved level of international competitiveness, etc. Obviously, it is impossible to create a universal classification of innovations.

For the purposes of our study innovations are grouped depending on the components of the production system to which the novelty refers: product, process, organizational, marketing, and eco-innovations. Based on the inquiry carried out by us conclusions may be drawn on the innovation activity of the enterprises and on the major factors influencing it, and a comparison may be made between the results of our study and the official data of the NSI and the EU.

Fig. 1 shows the number of industrial enterprises that have implemented the respective type of innovation in the course of the years out of the 85 companies that took part in the inquiry.

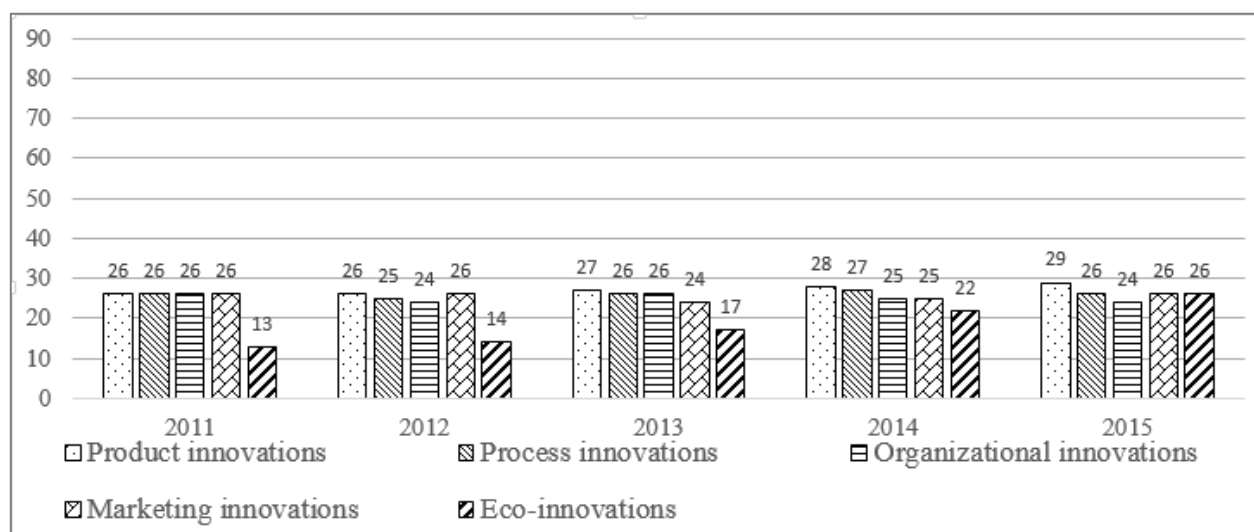


Fig. 1. Types of innovations by years
 Source: Author's research and calculations

Table 7 provides a summary of the percentage of the inquired companies that implemented the respective type of innovation by years.

Table 7. Share of inquired Bulgarian industrial enterprises that implemented innovations within the period 2011 – 2015

| Year | Product innovations | Process innovations | Organizational innovations | Marketing innovations | Eco-innovations |
|------|---------------------|---------------------|----------------------------|-----------------------|-----------------|
| 2011 | 30.59 % | 30.59 % | 30.59 % | 30.59 % | 15.29 % |
| 2012 | 30.59 % | 29.41 % | 28.24 % | 30.59 % | 16.47 % |
| 2013 | 31.76 % | 30.59 % | 30.59 % | 28.24 % | 20.00 % |
| 2014 | 32.94 % | 31.76 % | 29.41 % | 29.41 % | 25.88 % |
| 2015 | 34.12 % | 30.59 % | 28.24 % | 30.59 % | 30.59 % |

Source: Author's research and calculations

These results confirm that the innovative enterprises in Bulgaria are approx. 30% out of all the enterprises as stated also in the statistical reports of Bulgaria and the EU.

The conclusions that may be drawn are, as follows: the largest number of companies have succeeded in implementing product innovations, and there is a trend for the increase of the new products: there is also decrease in organizational innovations and significant increase of eco-innovations; the process and marketing innovations vary showing both up and downward trends, but within small limits.

In order to provide a better purposefulness of the study the factors influencing the innovation development of the companies are divided into two large groups in the questionnaire cards. Each of them has two sub-groups – company-internal and external factors. The first group is comprised of the factors that are conducive to the innovations, and the second is comprised of the factors that hinder the development of innovation activity.

Table 8 shows the 20 factors which based on the research results exercise the strongest influence on the innovation activity of the Bulgarian industrial enterprises arranged by descending power of influence. There is also a calculation of the percentage of inquired that indicated the respective factor as the most significant.

Discussion

The study gives us grounds to state that the factor exercising the most intense unfavorable influence on the innovation activity of the Bulgarian industrial enterprises is the lack of human and financial resources.

The human factor has a decisive influence on the success of innovations. The accelerated rates of scientific-technical progress bring high requirements to the level of preparation of the specialists in the field of innovations, to their educational and qualification level, acquired experience and motivation for continuous development and improvements. Successful innovations demand a very good combination and cooperation between the creative specialists, R&D, introductive, production and marketing specialists, cooperation with universities, and joining the entrepreneurs' and innovation networks in the country and the EU.

The staff in the modern innovative companies should have the required knowledge and skills in the field of engineering creativity, the ways and methods for choosing objectives, tasks and strategy of the company in the field of innovations, the organization and management of research activities, modern information and communication technologies and business communications, market research and marketing of new products, etc.

Table 8. Factors influencing the innovation activity of industrial enterprises in Bulgaria and their significance

| Factors | Company-internal factors | Relative share | Company-external factors | Relative share |
|-----------------------------|--|----------------|--|----------------|
| Innovation favorable | 1. Presence of entrepreneur's spirit | 33.29% | 1. Public innovation programs | 27.63% |
| | 2. Highly qualified staff involved in innovation activity | 30.63% | 2. Transfer of scientific ideas and products from scientific organizations to the enterprise | 24.61% |
| | 3. Internal programs for staff training and development | 16.65% | 3. Influence of branch associations on the innovation policy of the enterprise | 19.12% |
| | 4. Vast managers' experience | 8.52% | 4. Customers' and Suppliers' influence on the innovation policy of the enterprise | 15.83% |
| | 5. Compliance of production activity with the marketing researches on market needs | 5.87% | 5. Use of consultant services | 8.74% |
| | 6. Others | 5.04% | 6. Others | 4.07% |
| Innovation impeding factors | 1. Lack of qualified staff | 33.19% | 1. Lack of external sources of financing | 32.43% |
| | 2. Lack of internal sources of financing | 29.34% | 2. Large direct expenses of innovations and too many risks | 24.06% |
| | 3. Low technical and technological level | 14.45% | 3. Lack of clear state policy in the field of innovations | 23.47% |
| | 4. Lack of information of the markets | 7.76% | 4. Long period of return on expenses for the novelty | 9.38% |
| | 5. Inefficient management of human resources | 7.76% | 5. Lack of trust to the new products by the part of consumers | 8.45% |
| | 6. Others | 7.50% | 6. Others | 2.21% |

Source: Author's research and calculations

In order to overcome the personnel barriers to innovations the companies should work to transform the human factor into human capital, which combined with the information and organizational capital shall become a decisive factor for the implementation of the strategy and the achievement of the company's objectives.

Investments and financing of innovations are also a big barrier that hinder the innovation activities of Bulgarian industrial enterprises. In particular this barriers are manifested in the insufficient sources and unfavorable conditions of financing of innovations, the need for too high expenses for innovations, a high financial and economic risk, too long period of return of expenses on innovations, insufficient financing of research works by the part of the state, as well as insufficient financing of innovation activities by the part of the private sector, risk funds, etc. Due to the lack of financial resources for funding the innovation activities many companies develop and produce products of a low technological level.

Our study shows that there is also a lack of clear state policy in the field of innovations. There is no well-developed scheme of financial, customs, tax and other reliefs for stimulation of research works and innovations.

The information barriers are related to the need for incessant and updated information on the condition of the current and future technological basis, as well as of the current and future needs of society. In our opinion such information on the state of technologies, products and markets may be obtained from various sources: results from one's own research and technological activities, specialized publications, contacts with universities through cooperation and joint activities and cooperative works with partners in the field of innovations, business exhibitions of licenses, fairs and exhibitions, from the suppliers, competitors, sales channels and consumers, advertising agencies, brokers in the field of innovation activity and transfer of ready technologies, etc.

The use of modern information means and systems and most of all of the internet and the development of management of knowledge shall contribute to overcoming the existing information obstacles to innovations. Hence the major reasons for the existing of information barriers in the companies are the lack of modern technical means, insufficient computer and language knowledge of the specialists, etc.

The lack of appropriate organizational forms, corporate innovative culture, appropriate managerial approach and style of management, forms of stimulation and motivation of specialists, of options for cooperation through joining entrepreneurs' networks, etc., may prove to be a serious barrier to the implementation of the innovation activities of a particular company.

Particularly large psychological barriers to innovations are the resistance to changes, fear from uncertainty and failure, and most of all of the risk the company takes by investing in a particular innovation project with regard to the return on the investment made.

The new products are not easily and quickly accepted by the market. The speed of acceptance by the various groups of consumers is different. Therefore in order to overcome the barriers the companies using their marketing tools should influence and stimulate this process by developing the most suitable marketing mix for each market segment.

Every company should identify the manner of influence of the different groups of factors on its innovation activities and implement a strategy to restrict the negative and to support the stimulating influential factors.

Conclusion. Bulgarian industry is significantly behind the others in terms of innovation development. The major problems faced by our companies may be divided into three groups.

The first group of problems: insufficient qualification of staff; lack of sufficient professional skills and manager's experience; insufficiently efficient or lacking system of motivation of staff to creative activity; restricted material and technical resources; restricted financial resources; high cost of consultant's help; high cost of acquisition of know-how, for acquiring and maintaining patents; lack of long-term outlooks and of clear innovation strategy.

The second group of problems: insufficiently developed regulatory framework and poor institutional support for business and innovations; lack of psychological readiness and perception of society.

The third group of problems: fear from unsuccessful innovation activity; largely undetermined environment; already allocated market; marketing issues related to market research; limited needs of market.

All these problems seriously restrict the companies' abilities to implement efficient innovation activity or any innovation activity at all.

The following directives for enhancement of innovativeness of the enterprises may be formulated: increase of entrepreneur and innovation culture in the companies; increase of the level and quality of human capital; improvement of the motivation of the staff involved in innovation

projects; improvement of the engineering and technological level of production; use of the capacities of technological transfer and cooperation in innovations; stimulation of cooperation in the field of development and implementation of innovation projects with scientific and research structures; undertaking actions for defense of the objects of intellectual property; expansion of the scope of the used financial instruments and increase of the share of expenses for innovation projects; stimulation of innovation activity by the part of the state.

Following the example of the developed countries in Bulgaria a mechanism should be established for financial support of industry for the development and introduction of new products depending on the market needs. Work has already begun to that direction and in the course of the recent years various programs and projects have been launched in Bulgaria financed by governmental institutions and foreign funds for stimulating the innovative solutions.

References

1. Business statistics, Multi-branch statistics. Retrieved from www.nsi.bg
2. Business statistics, R&D, innovations and information society. Retrieved from www.nsi.bg
3. Varamezov, L. (2013). Innovation management. Svishtov.
4. Drucker, P. (2002). Innovation and Entrepreneurship, publ. "Klasika i stil", Sofia.
5. Karolova, T. (2003). Innovations and innovative development, Univ. Publ. "N. Rilski", Blagoevgrad.
6. Kirzner, I. (2010). Competition and Entrepreneurship, Publ. „Socium“, Chelyabinsk.
7. Kotler, P. (1991). Fundamentals of Marketing, Publ. „Progress“, M.
8. Marx, K. (1988). Capital, vol. 1, Publ. Partizdat.
9. Marshall, A. (1984). Principles of political economy, p. II, Publ. „Progress“, Moscow.
10. Oslo Manual, 3rd edition, Guidelines for collecting and interpreting innovation data, 2005.
11. Porter, M. (2004). The Competitive Advantage of Nations, Publ. „Klasika i stil“, S.
12. Pride, W., Ferrell, O. (1994). Marketing: concepts and strategies, Publ. ForCom, S.
13. Ricardo, D., On the Principles of Political Economy and Taxation, Retrieved from <http://books.efaculty.kiev.ua/isekvc/10/>
14. Ruseva, R. (2002). Innovation Networks – the New Paradigm for Creation and Diffusion of Knowledge. *Strategies of Educational and Scientific Policy, 1*.
15. Say, J.B. Treatise on Political Economy Retrieved from <http://finfree.narod.ru/jan.htm>
16. Smith, A., The Wealth of Nations, „Rata“ Publishing Complex, S., 2010.
17. Casson, M. (1998). An Entrepreneurial Theory of the 12Firm, WP, University of Redding, Retrieved from <http://www.druid.dk/conferences/summer1998/conf-papers/casson.pdf>
18. Filipova, M. (2009). Management of the Company in Crisis Situations, SWU Press, Blagoevgrad.
19. Kalaidjieva, V. (2013). Analysis of the innovation activity of the enterprises in the industrial sector in Bulgaria, *Economics and management, vol. 9, 2*, 39-52.
20. METADATA, Statistical classification of business activities of the European Community (NACE Rev. 2). Retrieved from http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=NACE_REV2&StrLanguageCode=BG&IntPcKey=18495404&StrLayoutCode=HIERARCHIC
21. Regional Innovation Scoreboard 2014. Retrieved from <http://bookshop.europa.eu/en/regional-innovation-scoreboard-2014-pbNBBC14001/>
22. Schumpeter, J. (1934). The Theory of Economic Development. Cambridge, Mass.: Harvard University Press.