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INNOVATIVE ENTERPRISE ACTIVITY ANALYSIS

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***Summary**: Innovative business development applying new technologies is considered. Historical analysis over recent years in the field under study is conducted. The results of small innovative enterprises development in Russia are analyzed. The ways of persuading the consumer to buy the innovative product are demonstrated.*

***Key words**: small innovative enterprise, innovative devices, commercialisation of research and development, business*

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1 INTRODUCTION

Several years ago we could not even imagine that there will be such a concept as innovative business. For the moment, development of new technologies has reached such heights that it is difficult to surprise somebody with a new invention in any field of activity. Herewith we shall consider an innovation to be an implemented novelty which leads to qualitative growth in efficiency of sales and processes demanded on the market and which is a result of intellectual activity of a person, his/her imagination, discoveries, and rational reflections as well. Both devices, ways, methods and marketing decisions can be innovative. Today, for the business to be successful it should be based on an innovative product. So, small innovative enterprises (SIE) based on creation of his/her own innovative device are considered by young businessmen a new qualitative round of business development.

2 RESEARCH METHODS

Within the framework of research the analysis of definitions, the method of analogies and a number of statistical methods were applied.

3 DISCUSSION

Recently the development of innovative technologies has been paid special attention to. Various funds have been created to support young talents who can help scientists implement their ideas and then receive a grant for a SIE development. Small innovative enterprises are an

important component of a national innovative system as they operate as a link between the science and the manufacture. Creation of small innovative enterprises is regulated by the Federal law of the Russian Federation N 217-ФЗ of 2 August 2009 about small innovative enterprises at higher schools.

This law was adopted approximately 10 years ago, but market transformations taking place in the Russian Federation at present managed to commercialize only about 10 % of all scientific research results. According to experts, Russia is lagging 40-50 years behind the advanced countries in this sphere. Moreover, statistical data of the all-Russia non-governmental organization of small and medium-sized business "Opora Rossii" (Support of Russia) consider that the amount of innovative enterprises abroad reaches approximately 57 % while in Russia this figure does not exceed 2 %. In such a situation the government tries to put into practice state reforms and offers various ways of coping with the challenge of innovative development of Russia, first of all, using scientific potential of higher educational institutions. Taking into account the problems facing industrial enterprises under the hard burden of reforms and sanctions from the European countries and the USA, the task of association of efforts of the science and the industry comes to the fore. This was the aim of creation SIEs at higher schools the activity of which consists in practical application (adoption) of the results of intellectual activity exclusive rights on which belong to scientific institutions. [1]

The law has been operating for several years and has contributed to the trend of development and statistics of innovative activity shown in Table 1.

Table 1 - *Basic parameters of innovative activity*

№		Unit of meas.	2010	2011	2012	2013	2014	2015
1.	Innovative activity of organizations (proportion of the organizations which implemented technological, organizational, marketing innovations in accounting year in the total number of the organizations surveyed)	per cent	9.5	10.4	10.3	10.1	9.9	9.3
2.	Proportion of the organizations which implemented technological innovations in the total number of the organizations surveyed	per cent	7.9	8.9	9.1	8.9	8.8	8.3
3.	Goods manufactured and shipped, works done and services rendered by the organization using its own forces	mln rbs	25 794 618.1	33 407 033.4	35 944 433.7	38 334 530.2	41 233 490.9	45 525 133.8
	Including innovative products, works, services		1 243 712.5	2 106 740.7	2 872 905.1	3 507 866.0	3 579 923.8	3 843 428.7
4.	Proportion of innovative products, works, services in the total amount of the goods shipped, works done, services rendered	per cent	4.8	6.3	8.0	9.2	8.7	8.4
5.	Expenses for technological innovations	mln rbs						
	In actual prices		400 803.8	733 815.9	904 560.8	1 112 429.2	1 211 897.1	1 200 363.8
	In fixed prices in 2000		101 124.6	159 745.5	183 347.5	214 641.4	218 128.3	186 263.5
6.	Proportion of expenses for technological innovations in the total amount of the goods shipped, works done, services rendered	per cent	1.6	2.2	2.5	2.9	2.9	2.6
7.	Proportion of the organizations which implemented organizational innovations in accounting year in the total number of the organizations surveyed	per cent	3.2	3.3	3.0	2.9	2.8	2.7
8.	Proportion of the organizations which implemented marketing innovations in accounting year in the total number of the organizations surveyed	per cent	2.2	2.3	1.9	1.9	1.7	1.8

№		Unit of meas.	2010	2011	2012	2013	2014	2015
9.	Proportion of the organizations which implemented ecology innovations in accounting year in the total number of the organizations surveyed	per cent	4.7	5.7	2.7	1.5	1.6	1.6

The progressive tendency of development can be observed during the whole period of research in all spheres of innovative activity. Innovations fall into four categories: technological innovations (process, product), marketing innovations, organizational innovations and ecological innovations. The proportion of the first three types of innovations grew constantly in 2010-2013. However there was a small recession after 2013 connected with global economic crisis and the beginning of imposing sanctions against Russia, but still this level did not fall below 9 %. All in all, it should be noted that the rate of speeding up the innovative processes in the economy of Russia remains low. The share of the innovatively active industrial enterprises (7.9 %) is 5-6 times lower here than in the advanced countries of Europe [4]. Nevertheless the results of the accounting year show positive tendencies, the proportion of the organizations which implemented technological innovations in the total number of the organizations surveyed increased up to 8.3 % (Tab. 1).

As to the expenses on technological innovations, significant growth is observed on the results of accounting year since 2010. The figures have increased in actual prices from RUB 400 803.8 up to RUB 1 200 363.8, almost 3 times. According to the table, the index for own-produced goods shipped nearly doubled in the period under consideration and reached the figure of RUB 45 525 133.8. We can observe the same tendency on the example of a certain area, comparing parameters not only for Russia. Let us consider the figures for the Russian Federation as a whole, for Privolzhsky Federal District and for the Republic of Mari El. Table 2 contains figures for the period of 2010-2015. The volume of innovative goods, works and services of the constituent units of the Russian Federation grows both in general and in view of the goods manufactured and shipped, works done and services rendered by the organization using its own forces.

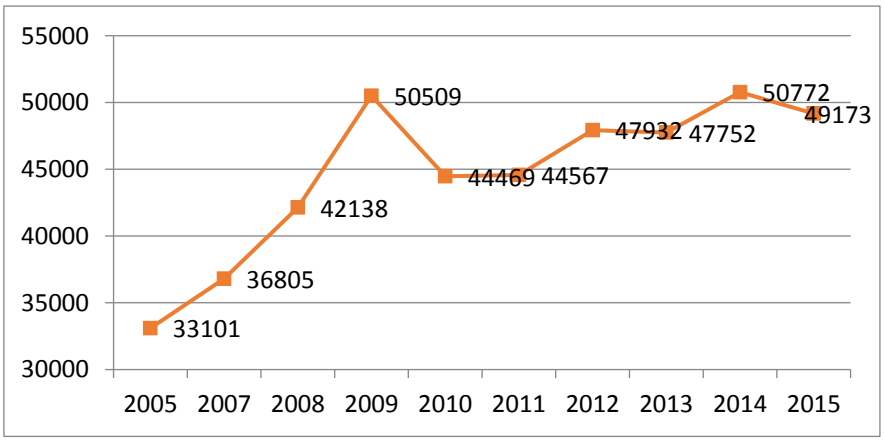
Table 2 - *Volume of innovative products, works and services per a constituent unit of the Russian Federation*

Russian Federation						
Year	2010	2011	2012	2013	2014	2015
Total	25 794 618.1	33 407 033.4	35 944 433.7	38 334 530.2	41 233 490.9	45 525 133.8
Goods manufactured and shipped, works done and services rendered by the organization using its own forces	1 243 712.5	2 106 740.7	2 872 905.1	3 507 866.0	3 579 923.8	3 843 428.7
Privolzhsky Federal District						
Year	2010	2011	2012	2013	2014	2015
Total	5 339 666.2	6 943 143.9	7 458 276.8	7 973 825.4	8 525 700.2	9 251 559.2
Goods manufactured and shipped, works done and services rendered by the organization using its own forces	545 954.9	781 944.9	950 604.8	1 128 642.7	1 179 545.3	1 198 881.4
Republic of Mari El						
Year	2010	2011	2012	2013	2014	2015
Total	56 666.9	70 335.7	79 173.1	69 828.6	95 144.3	112 662.6
Goods manufactured and shipped, works done and services rendered by the organization using its own forces	1 632.2	3 432.8	804.8	1 551.6	9 925.6	10 323.2

Over the last 5 years increase in sales volumes of the innovative goods, works and services by the constituent units of the Russian Federation has been observed. It is associated with many factors, strong support of small business development being one of them. It allows to raise innovations in Russia on a new level. First of all, the government has decided to pay special attention to higher educational institutions innovative structure and organized state programs and funds for them to take part in competitions and receive grants. Industrial lines at the existing enterprises have been modernized and equipped up to the state-of-the-art increasing the capacity of those enterprises multi-fold. Indeed, the figures for smaller areas are much lower than for Russia in general. Let us consider Privolzhsky Federal District. The volume of the own works done, services rendered and goods sold by an organization amounted to RUB 5 339 666.2 in 2010, as for the results of the accounting year they received RUB 9 251 559.2 showing noticeable growth. The Republic of Mari El showed the figures of RUB 56 666.9 in 2010 and RUB 112 662.6 in 2015, accordingly.

Meanwhile, it is necessary to note that there are cases of innovations simulation, because most enterprises prefer to invest into borrowed technologies of production rather than into their own research. This is supported by the results of regression analysis which has shown high correlation of the volume of innovative goods, works and services with the volume of investments into fixed capital (R2=0.94), research and development (0.92) and technical innovations (0.97), the correlation given having some features which are not typical for innovations: the relationship is characterized by linear dependence and the function reacts to the changes of argument instantly, without a time lag. This may be due to the problems with reliability of the data given by the enterprises, but it is more probable, that innovations are simulated.

Figure 1 - *Number of patents issued, pcs*



Financing of science from the federal budget is illustrative of inefficient expenditure of investment resources: constantly growing expenditures on civil science (they have grown from RUB 17 396.4 mln to RUB 437 273.3 mln in 2000-2014) and R&D (from RUB 76 697.1 mln to 847 527 mln over the same period) did not give growth in the number of patents issued (see Fig. 1). Low factor of correlation between the number of patents issued and the volume of budgetary injections into science prove low efficiency of state money spending. The bang for the buck index for technological innovations shows sensitive dynamics and a low level: each invested ruble gives a four ruble innovative production, which is comparable to fifteen-year old parameters. [3]

Table 3 - *Expenses of organizations for technological innovations, per a constituent unit of the Russian Federation*

	2010	2011	2012	2013	2014	2015
Russian Federation	400 803.8	733 816.0	904 560.8	1 112 429.2	1 211 897.1	1 203 638.1
Privolzhsky Federal District	79 303.3	165 199.9	244 103.7	284 845.9	331 308.2	300 124.5
Republic of Mari El	221.7	549.1	935.1	858.5	990.9	744.0

Expenses on technological innovations are connected with updating the equipment mainly by purchasing it abroad. Russian industry and applied science cannot provide all enterprises with modern equipment. So, significant part of financial resources of the country goes and will go annually on importing this equipment. Opening branches of foreign machine-building companies or joint ventures in Russia (e.g., motor industry) can somehow soften this problem [2].

Financial resources are also required for upgrading the equipment. Extractive industry companies possess such resources, while the enterprises of other branches of industry frequently do not. Stimulating innovative activity, it is expedient to provide sources of financing expenses of enterprises for purchasing modern, both domestic and foreign-made, equipment to modernize manufacturing process [3]. There are different ways to solve the problem. Some of them are registration of the conveyed equipment as contribution into charter capital of promising Russian enterprises, leasing development, stimulating bank investment crediting, interest rates subsidizing. Thus the problem of upgrading the equipment will be one of the basic problems for the years to come, its solution being necessary to activate innovative activity in Russia.
However, this is not the only challenge for innovative business development. The recession of sales is connected with inability of SIEs to distribute and advertise their production correctly. The ways of coping with this problem and increasing sales are presented in Tab. 4. The analysis was carried out, which resulted in revealing optimal techniques having their benefits and drawbacks. Using the table, you can choose the technique ideal for you.

Table 4 - *Comparison of the ways of involving the client*

	Benefits	**Drawbacks**
Altercasting	Based on natural needs of people Desire to resemble somebody and desire to be admired	Does not affect everyone
AAB	Suggestion to buy with a method of denying To cause one's own desire to buy products	Confusion Consumer may reject to buy the product
«Golden handcuffs»	There are always favorable offers and promotional actions for the buyer	Causes suspicion about the quality of the goods
«Isolation»	Control of emotions and doubts of a person, concentration of his / her attention on your concrete product	The consumer does not receive enough of arguments which confirm your competence

«Priority objective»	Sense of something supreme, affecting emotions	Risk to go too far and disappoint the client
«Stop-thinking»	Instant decision-making	Works only for the first time, does not affect everyone
«Lexis»	Strong involvement in advertising, desire to learn something new	Negative effect is possible

4 CONCLUSION

Thus, it is possible to draw a conclusion that the innovation is a change in the economy, the industry, the society, the behavior of buyers, manufacturers, and workers. The result of innovative activity is always know-how which represents, partially or in full, confidential knowledge, experience, skills, including the data of technical, economic, or administrative nature [5]. Innovative activity is one of the determining factors of business and economy development all over the world. Given modern vigorous and even aggressive rates of development of economy and business, as well as very strong competition, it is impossible to exist without constant modernization of enterprises and improvement of products. To maintain business innovative, one is required to be in trend, to keep up with the development of innovations and to understand all modern know-how as well. Innovative business is progressing, though slowly. New platforms for talents development, forums for searching young scientists are created, competitions and start-ups are held, and science towns are developed for doing research projects and their results promotion into public. Here are the organizations participating in financing small business enterprises innovative activity in the Russian Federation: Bank of development and foreign trade activities State Corporation, JSC Russian Bank of development, JSC Russian Venture Company, Fund of assistance to development of small forms of the enterprises in the field of science and technology, CJSC MICEX, all-Russia non-governmental organization of small and medium-sized business "Opora Rossii" (Support of Russia), Russian Association of Venture Investment, JSC Sberbank.

In Russia, undergoing the transition to a modern model of economic growth, the level of innovative activity is inadmissibly low for a world power. It is necessary to note, that on a national scale the effect from innovative activity is almost imperceptible. Constant and productive contacts between science and business, as well as effective national innovative system as a whole are not formed. Elimination of basic problems in the development of science, education and innovations demands essential resource and time expenses.

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