

Innovative processes in the company “Innovative Management Systems” (Russia)

Anzhela Litvinova^{1,*}

¹RUDN University, 117198, 6 Miklukho-Maklaya str., Moscow, Russia.

Abstract. In connection with the marked activation of absolutely new approaches to the organization of business processes leading to the effective operation of companies on the international market and the appearance of a multitude of new goods and services on the global market, the Government of the Russian Federation is seriously puzzled today with the issue of creating an innovative space in the country that would enable the environment for implementing effective innovations that can not only improve existing processes and direct them to new trajectories, but also stimulate new approaches to business processes and the emergence of new types of goods and services on the market that are the basis for a competitive economic system.

1 Introduction

According to the opinion of politicians and many scientists, the creation of the most innovative and active environment is mainly aimed at creating a favorable infrastructure that provides key players in the innovative space, innovators, with all the necessary resources developed in advance and proposed in a certain formulated conceptual form. Based on these views in different countries, various innovation centers, business incubators, technology parks, technopolis, science cities, etc. began to be created. “The first technopark” was created in the 1950s at Stanford University (USA). At present it is the largest technopolis, containing about 8000 innovative firms. Their characteristic feature is that each of them employs less than 10 scientists. They conduct an intensive exchange of scientific, technical, and product ideas among themselves, thereby contributing to the development of science-intensive advanced technopolicies. Equally important is their assistance in solving regional and municipal problems of the economy, social, and cultural development. A technopark, in the conceptual sense, is an area suitable for creating an innovative infrastructure, on which it is possible to create comfortable conditions for the life and work of residents. This is achieved due to the size and relative proximity of scientific and industrial centers to each other, as well as the presence on the territory of necessary providers of services for business and transactions such as banks, hotels, shops, restaurants, information centers, etc.

This approach to the organization of innovative processes has shown its effectiveness not only in the US, but also in other countries. This has been happening for many years due

* Corresponding author: angellitvinova@inbox.ru

to the accumulated market and financial mechanisms in business. In Russia, it is effective only for large projects being financed from various sources and oriented to certain goals and tasks set by the government, which reduce the risks of contractors to minimum indicators. In this regard, the problem remains that this model may not always be suitable for organizing flexible business processes in a company whose main activity is the solution of a set of constantly changing tasks for consumers from the free market. To implement the effective operation of such a company, it is necessary to constantly develop new methods that ensure the smooth running of the entire business process, sometimes consisting of small tasks, at all cycles and intervals of its life cycle. This requires a creative individual approach to solving all issues in the organization of the management of the entire company without disrupting the integrity of its existence, while at the same time with full readiness for taking risks. To do this, any manager needs a serious skill, the ability to quickly make management decisions, as well as the ability to bring them to the results, which is closer to the performance of flexible business activities, which is related to science and innovation.

With the aim of forming an innovative environment for the development of interaction between educational institutions and enterprises in the economic space, on the basis of the Federal Law of the Russian Federation of August 2, 2009, No. 217-FZ, universities were given the opportunity to register small innovative enterprises (SIEs) as independent small businesses on their territory [1]. SIE activities were initially focused primarily on the commercialization of existing intellectual property objects at universities, as well as their active promotion in the market. The activity titled “73.10: Research and development in the field of natural and technical sciences” should be declared as the main type of economic activity in accordance with the all-Russian Classifier (OKVED) when registering such an enterprise, and such an organization must be entered in the SIE Register established by the Ministry of Education and Science of the Russian Federation. It should be noted that in accordance with the Federal Law FZ-209 “On the development of small and medium-sized businesses in the Russian Federation,” SIEs as independent business units have the right to conduct any activities provided for by the legislation of the Russian Federation, in accordance with the requirements of the OKVED in the form of additional ones [2]. Accordingly, due to the easy construction of the processes of interaction of such an enterprise with the main participants of the innovation environment in this context (universities, the state, and businesses), the SIE has the potential to act as a key element in the system of developing completely new integration approaches and introducing them into the qualitative organizational processes of scientific environment convergence with the state (at the level of interaction with representatives of government bodies) and the business community, while minimizing barriers in the management.

2 Innovative processes

Consider such a company as a company registered in the form of a limited liability company “Innovative Management Systems” (hereinafter referred to as IMS) at the Federal Higher Educational Institution “Russian People's Friendship University” (RUDN University). The company is registered as a SME with a share of the university in the authorized capital of 25 percent, made in the form of an intellectual property object “know-how.” Basically for today, the company carries out the activity directed on rendering of services to manufacturers of the consumer goods in light industry in the form of developing design and technical documentation for their introduction in manufacture at various stages and in various volumes. The company has short, medium, and long-term planning. In addition to the above activities, IMS management, in conjunction with the university's management, is focused on the parallel inclusion in the process of several new projects

aimed at the development and growth of the company in the medium term, but which are risky and innovative at this stage of development and entry into the market.

According to the theory of innovation, innovations are new products (services), processes, strategies, and business models that are conceived and implemented to bring to the clients, employees, and owners of the company conscious benefits (financial, consumer, social, etc.) that contribute to the company's success in the market [3]. Accordingly, a small innovative enterprise is quite suitable for the definition of an innovator company that is able to flexibly operate in a different economic environment, create innovations and freely enter them into any market space. According to the data of the National Science Foundation of the United States, SIEs are more resistant to the negative influence of the external environment (socio-economic system) and are really focused on achieving the set goals, since each product undergoes a full theoretical and applied cycle from idea to entry of new ready products into the market. This allows the management of such companies not only to save resources, but also to increase the speed of the innovation cycle, to introduce more innovations in comparison with large firms. The search for an investor for the development and expansion of such production is not complex, ready for risks, and based on venture financing.

In the Russian practice, the financing of risky innovation projects differs significantly, so the maximum effect is achieved due to the competent development of the company's strategy to achieve its goal, as well as the ability of the managerial staff to make informed decisions and organize the entire business process. Using the model of "Three arenas of the innovator company" by Charles Prater, we will analyze the existing practical actions of the IMS company management [4]. When developing the strategy and implementing it, management strives for an accurate and quick solution of problems, which is achieved through the construction of direct communications and rapid interaction with university top executives, top managers of the business environment and representatives of government bodies. This allows in a short time to build algorithms of absolutely new actions and quickly make smart management decisions. The indicated horizons in the development of strategic planning and the desire to enter the scientific, technological, market, and educational environment that is focused on the constant growth of the innovative IMS enterprise in the international space. Consider the measures that we believe should be initiated to form a firm signal in the company that risk preparedness and open to innovation (Table 1).

As a result of the analysis, we can conclude that in the structure of the work processes of the RUDN University, the IMS can be in the role of an innovator company, acting independently and autonomously, but at the same time respecting the priorities of the university as a partner, interacting with representatives of the business environment and authorities in the organization and the solution of some joint tasks aimed at, for example, preparing and implementing breakthrough projects on import substitution programs, as well as emerging new professions and competences in the market.

The events that properly fill the "three arenas" of the IMS as an innovative company demonstrate the management's orientation towards high results, readiness for risks and openness to constant innovations. A SIE is able to develop and implement absolutely any new business processes, without experiencing a shortage of staff as it is on the part of scientists and students, the international scientific community, the government, and the business environment. This can serve as the basic foundation for the organization of its own flexible independent and free infrastructure in the development and implementation of an integrated business space with a number of specific project areas.

Considering the university environment as favorable for the implementation of effective innovation is worth noting that the IMS, as an independent business unit, able to carry out both technological and non-technological innovation so that do not require significant

investments and bringing significant material, labor, and energy resources. As a company-innovator, a SIE is able to develop and implement a variety of business projects, independently select the appropriate professional teams to develop (as contractual research) a methodology for the creation and commercialization of innovations, develop and describe all procedures for the production of new goods and services, and output them step by step in the production process and the market bypassing all bureaucratic barriers.

Table 1. The three IMS arenas.

Education arena	<p><i>1. Events:</i></p> <ul style="list-style-type: none"> - Developing the strategy of “growing in the process (in a spiral)” to achieve high indicators and their continuous improvement; - Developing scientifically based technologies on the results of specific studies, as well as their introduction into the production process; - Ensuring operative adaptation to changing market requirements for the purpose of rapid development of new goods (services); - Conducting an independent market analysis and development of methods for commercialization of own developments; - Capitalizing the company and increasing its value in the market due to the organization and implementation of competent business processes; - Registering the OIC properly in a short time; - Creating a single international cooperation platform for practitioners and researchers through various conferences, joint research and development, as well as seminars and master classes for representatives of science, business, and government; - Using modern technologies in the organization of business processes; - Striving only for modern technologies and always be in a trend; - Ensuring a rapid withdrawal of new goods (services) to foreign markets. <p><i>2. Notes:</i></p> <ul style="list-style-type: none"> - Thanks to its proximity to the university, the IMS has an excellent opportunity to attract specialists from a wide scientific environment (including foreign ones) to the process of developing and introducing innovative products, which facilitates the rapid and accurate formation of professional teams, even design assignments. - At the same time, an easy way out of the scientific environment into free market space helps to solve all theoretical and practical problems quickly and in a direct way, grouping them into a single business process. Thus, ideas are worked out qualitatively at all stages from research, design. and development to easy introduction of new goods (services) of any kind and purpose into production, including the process of their commercialization.
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Training arena	<p><i>1. Events:</i></p> <ul style="list-style-type: none">- Creating teams consisting of the necessary competent and professional members for any newly generated project;- Competent training of qualified personnel for themselves and innovative economy, increasing the level of competence in the management system of different industries due to the techniques of creative thinking;- Increasing the number of scientific personnel in the university due to the possibility of applied research in the IMS, which is useful for all;- Supporting the ability of each member of the team to developing their own ideas and implementing them, as well as encouraging the initiative in the development and implementation of new products, services for different customers, stimulating incentive mechanisms in the performance of tasks;- Generating and introducing completely new knowledge with an orientation toward conducting fundamental and applied research;- Developing all research and all activities in a single managed business process of the innovator company;- Orientation to modern methods of increasing the level of knowledge and competences due to modern technologies;- Using advanced instruments and mechanisms when integrating knowledge into practice;- Developing of joint projects and programs with the government. <p><i>2. Notes:</i></p> <ul style="list-style-type: none">- Thanks to the programs of academic mobility aimed at increasing the competitiveness of universities, the RUDN university constantly encourages staff to achieve high achievements in science, including at the international level. The IMS company has the opportunity to attract the most creative and advanced professionals to the projects from the scientific environment, including students, graduate students to conduct relevant research.- Staff training within the flexible project work is carried out continuously, qualitatively, relying also on an easy way out through the SIE from the scientific to the market environment for practicing tasks and ensuring their quick integration into production and output to the market.- Brainstorming is possible at any time due to the high mobility and flexibility of IMS and the adequacy of modern automated and digital systems.- It is possible to train own specialists to implement the planned business processes in the IMS company, which are carried out jointly with the university and representatives of the free market, attracting post-graduate students of the university to the practical research activities.
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Organizational culture arena	<p><i>1. Events:</i></p> <ul style="list-style-type: none">- Creating an internal organizational culture in spite of dynamism and frequent change of working design teams;- Introducing practices for the exchange of cross-cultural and cross-national characteristics in building links in the international scientific and business communities;- Developing a reward system for “explosive ideas” in various forms;- Motivation of the young staff for creative interaction with the external environment;- Flexibility in taking managerial decisions and the right to take decisions of each project participant in order to obtain a quick result;- Desire and support, coming from the leadership, of modern automated systems;- Competent organization of work and rest;- Managing the company with the use of the management mechanisms and modern economic tools being tested in the business environment for effective organization of the working space and improvement of the quality of labor. <p><i>2. Notes:</i></p> <ul style="list-style-type: none">- At the moment, absolutely new processes are being introduced at the university and a new innovative climate is being formed, which is reflected in the organizational culture of the university. Much comes when interacting with international cooperation programs, including those related to the project to increase the competitiveness of universities called the “5-100” project.- The SIE can completely formulate new ideas on the basis of clearly grouped and debugged business processes and working teams to ensure the achievement of the set goals from different participants in all processes (educational, scientific and technological, all OIC forms, including R&D and know-ho, as well as the commercialization of new products).
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Source: Compiled by the author on the basis of [4].

Thanks to the creation of new innovative products and directions, the demand for new professions and the development of their competencies will accordingly be formed. A SIE is able to generate the best methodology for step-by-step training and the growth of highly qualified personnel, as the creator and innovator of new directions in the economy. Such methods in direct interaction with the business environment will be reflected positively on employment of the population and creation of new jobs, possibly in the same process. Due to simple and open procedures, the number of competitors increases, leading to the renewal of the necessary “here and now” professions in the market. Accordingly, when introducing innovations in production and at the stages of commercialization, there will be a demand for qualified personnel for created jobs, prepared independently and in advance, thanks to a qualitative immersion in the process of developing and introducing innovations at the very first stages, “from the idea.” Such a mechanism facilitates the cooperation of all participants and accelerates the transfer of technologies and developments, reducing the innovation log between the idea and the creation of a new product.

Small and medium business, as a market factor in the transformation of the Russian economy, being in a crisis situation is more than interested in innovative approaches to the development and promotion of business processes. In the process of joint activities with representatives of the business community, innovation companies and universities can receive income from the introduction of IP products, legitimately use these results in production, create new breakthrough goods (services), and profit from their commercialization.

Close attention is being paid around the world to the SIEs, as they are an important element linking science and production. “The need for developing the direction in the present period is connected with the manifestation of a shortage of quality goods and competent professional staff from workers to management in the sphere of its production, capable of providing risks at every stage, from the moment of introduction, the development of new products and technologies that transform knowledge into a quality one, demanded goods” [5].

3 Conclusion

The importance and role of small innovative entrepreneurship in the economy of the country and large cities is becoming the main world trend. Russia is trying to match the innovation strategy in small business, but the success, unfortunately, is still negligible. On the part of the government, millions of rubles are allocated to support small innovative entrepreneurship, the construction of technology parks, the creation of business incubators, technological laboratories and platforms organized at universities that can implement innovative projects, but more work is needed to fully achieve the tasks set.

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