

Development of the Company Due to Forming of Innovative Structure

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Abstract: The study reveals the essence of the region's innovation infrastructure as a factor in increasing the efficiency of industrial enterprises. The relevance of the topic is due to the fact that the path of innovative development of industrial enterprises in the Russian Federation based on knowledge, on the change in the economic structure in favor of high-tech industries to increase human capital becomes the only possible way of development in the modern economics. Today, innovation is a component of the business process for companies that are focused on the preservation and strengthening of its position in the markets, especially in the long term. Moreover, innovation is based not only on inventions but on the efficient utilization of resources resulting from scientific and technological progress. The study concludes that the functioning of a modern tool of management in the conditions of growing changes in the external environment acts as a methodology of infrastructural development. The choice of directions and defining the scope of infrastructure development that takes place within the association of industrial enterprises are of the particular importance. The need for innovation in the field of infrastructure solutions plan arises when independent activities related to innovation activities can not achieve their goals. The winner is the company that is able to determine the time, place and subjects of association. Therefore, an adequate regulation of the relationship of enterprises engaged in innovation is the key of success in providing innovative economy. This focus of the new economic thinking requires a fundamental revision of the methodological approach used and the applied methodological tools. The problem of the Russian economy transition on an innovative path of development has been very relevant in the pre-crisis period and remains the same nowadays. It is impossible to overcome the country's dependence on conditions in the world without handling this problem, especially in the oil market. Active policy of innovative development of the economy must not take second place to fight the crisis. Only innovative renewal of fixed capital and the introduction of new technologies in the production of goods are able to provide a valid output of the economy from the stage of the crisis on the upward trajectory of its functioning and development.

Key words: Evaluation model, risk insurance, flood, building damage, Citarum watershed, development

INTRODUCTION

Innovative development of economy depends not only on how effective the activities of independent economic agents individually (focus on innovation) but also on how they interact with each other as elements of a collective system of creation and knowledge usage as well as with public institutions (LaHaye, 2006). The mechanism for providing interaction, today serves infrastructural development of the economy.

The innovative infrastructure is a set of organizations that contribute to the implementation of innovative activities including repose services for the creation and implementation of innovative products and services (Spiegel, 1983). Organization (elements) of the innovation infrastructure provides resources for innovative

enterprises and provides them with the services that are necessary for carrying out productive activities (Pareto, 1909).

Innovation infrastructure can be represented as a set of production and processing, expert consulting, financial, human resources, information and distribution subsystem. Services that provide organizations for innovative enterprises are presented in Table 1.

Support infrastructure is a set of public, non governmental, public, educational and commercial organizations that directly provide normal living conditions (operational services) and the reproduction of high-tech small businesses in general.

The purpose of formation of innovative business infrastructure-creating favorable conditions for its development by providing comprehensive and targeted

support for small businesses in a variety of areas of activity-property, personnel and information and consultation (Demyanova, 2011).

The items of innovative structures are selected and identified those which increase the efficiency of the high-tech small enterprises sector. Information

infrastructure organized by a group of organizations representing the information and consulting services (Table 2).

The innovative nature of the activity of small innovative enterprises requires rapid adaptation of both primary and auxiliary business processes to the

Table 1: Classification of services provided by organizations of innovation infrastructure for innovative enterprises

Types of services	List of services	Organizations of innovation infrastructure, providing services
Production and technology	The provision of industrial premises; Provision of non-production (office) premises including security software, communications (telephone, internet); The provision of production facilities and equipment; Assist in the development and promotion of innovative projects: Assistance in the preparation of ideas (projects); R&D; Prototyping	Technopark; business incubators; Innovation and technology centers; innovation and industrial complexes; collective use centers
Expert consulting	Consulting services in the area: technology (resolution of issues that arise during the manufacturing process); Legal (legal protection of the enterprise, the resolution of issues related to intellectual property, certification); Management; Investments; Economics and finance; Marketing; Foreign economic activity	Technology transfer centers; consulting centers; innovation centers; coaching centers
Financial services	The provision of innovative enterprises funds (budgetary and extrabudgetary) by: Investment; Credit facility, etc	Budget funds; venture capital funds; innovation funds; insurance funds; investment companies
Staffings services	Choosing and assignment of experts; Improving the skills of the company	Universities educational institutions; technology parks
Information services	Bringing information on new developments to potential customers; Organization of the consultation on the use of new developments; Access to patent information; Provision of information on markets; Access to the Data Base (DB) of statistical information; Create and database support	Database; information centers; think tanks; information-analytical centers; statistical centers; scientific co-ordination centers
Sales services	Mediation; The organization of exhibitions and presentations; Organization of participation in conferences and seminars	Foreign trade association; specialized brokerage firm; exhibitions; venture fair
Other services	Patents, preparation of legal documentation; Record keeping; Bookkeeping; Preparation of business plans; Organizational services, secretarial services, etc	Technopark; business incubators; innovation and technology centers; technology transfer centers; consulting center

Table 2: Elements of innovation infrastructure

Infrastructure elements	Definition	The direction of support of Small Innovative Enterprises (SIE)
Analitic center	Consulting company providing services in the field of conceptual analysis and design to solve complex problems of strategic planning and management of high-tech enterprise	Development of competitive development strategy of the IIP in the medium and long term. Formation of the business model MIP. Engineering business areas and business processes of high-tech companies. Development of organizational and functional structure of the IIP
Information center	Companies that provide access to vast databases of scientific and technical information related to the sectoral specialization of the IIP	Providing unrestricted access to research libraries, directories and other information sources necessary for research and development and to maintain the competitiveness of high-tech products on the market
Center of Intellectual property and copyright (patent centers) expertise and technology commercialization	Organizations provide legal services in the field of patent and copyright law to small and medium-sized innovative enterprises	Consultation of highly qualified specialists in the field of patent law. Promotion of innovation activity agents in the qualified preparation of materials for the protection of their intellectual property. Expertise, valuation, legal protection of intellectual property IIP at the stage of commercialization
Expertise and technology commercialization centers	Professional and expert organizations, offering its customers a full range of advisory and valuation services in the broad areas of activity as well as the transfer of new technologies into commercial use	Conducting different kinds of examinations of high technology products in the derivation of it on the market at different stages of the innovation cycle. Provision of business services for the commercialization of scientific and technical work at all stages of the life cycle of innovative products

Table 2: Continue

Infrastructure elements	Definition	The direction of support of Small Innovative Enterprises (SIE)
Licensing centers, standardization and certification	Commercial organizations that provide acceleration obtaining the necessary documentation in the derivation of innovative products to the market	Testing and certification of high-tech products. Licensing and standardization of innovative products and processes
Marketing research center	Professional expert organizations to ensure the provision of specialized services in the field of marketing research at various stages of the life cycle of innovative products	Development of marketing strategy. Mediation in the formation of a portfolio of innovative enterprises orders. Development of strategy of advertising and branding activities of IIP. Conducting market research and product innovation market analysis at the stage of R&D. Promotion of the market of goods (works, services) for the high-tech sectors of the economy. Analysis of the effectiveness of marketing activity of the subjects of innovation activity
K coaching centers	Training center, designed for managers and specialists of the IIP on the legal, economic and technical issues of creation and development of innovative businesses	Promotion of professional and personal growth of innovative specialists of enterprises and organizations. Consulting aimed at obtaining new knowledge in the field of innovation, management at the stage of the organization of the IIP
Legal consulting centers	Commercial organizations providing support for business customers of legal affairs	Consulting and outsourcing of state registration process IIP Providing information and assistance to complete the package of documents for obtaining benefits and subsidies in the framework of national and regional small business support programs
Economic consulting center	Companies that provide consulting services in the field of planning and accounting of economic activity of IPI	Consulting and accounting outsourcing and IIP statements Planning for the current industrial and economic activity
Innovation and investment center (Chamber)	State, public and commercial organizations engaged in the search for investors to promising innovative projects	Maintaining a database of investors and provision of information about innovative projects MIP requiring investment. The organization of meetings, presentations, exhibitions and personal meetings with potential investors, representatives of small business innovation

conditions of dynamically changing environment (Garrison, 1991; Frolova, 2006). In accordance with the methodology of control is appropriate only support outsourcing business processes resorted to small innovative enterprises that is due to lack of financial and human capital at the stage of formation and development.

Thus, the formation of the information infrastructure to support innovative enterprises due to the need to reduce transaction costs due to full or partial outsourcing support business processes-management and development which are almost identical for all small high-tech enterprises.

MATERIALS AND METHODS

The subjects of innovative activities who are engaged enter an innovative cluster: transfer of results of scientific and technical activities to producers of innovations (higher education institutions, departments and laboratories of industry faculties, scientific research institute (academic and industry), design offices, innovative entity, independent inventors and developers); directly production (innovative entities, science and technology parks, innovative and technological centers); sale (centers of a transfer of technologies, specialized intermediary firms, exhibitions and venture fairs); consumption of innovative products and services (market of the knowledge-intensive products, industrial enterprises).

The elements of innovative infrastructure entering a cluster allow to unite subsystems of knowledge acquisition and production and to provide complete innovative process, processing knowledge gained as a result of scientific and technical activities (on a system entrance) into innovative products, services, technologies (at the exit). At the same time, efficiency of an exit is determined by a condition of innovative infrastructure, availability of all elements, interrelations, necessary for its use between them and also efficiency of interaction of the managing director and managed subsystems.

Elements of a production and technological subsystem (science and technology parks, business incubators, the innovative and technological centers) directly participate in innovative process and can be considered as “kernel” of an innovative cluster around which its structure will be created. At the same time, these elements perform support of the innovative entities: production and technological (transfer of basic technologies that facilitates exchange of the ideas and knowledge transfer and a know-how; centers of collective use of the expensive equipment, transfer of processing equipment to leasing); rent (preferential lease of production and office rooms).

Other elements of innovative infrastructure provide innovative process by rendering various services to the innovative entities including services in consulting, protection of intellectual property, financing, insurance, information support and legal maintenance of innovative activities and also services in training and sale of innovative products.

In an innovative cluster, there is also an interaction between the innovative entities and industry scientific and educational institutions that is necessary for ensuring market orientation of basic and applied researches, the high level of practical training of specialists on innovative management.

Public authorities make corrective action and perform the state investments aimed at the development of potential of innovative clusters and forming of favorable conditions for their activities.

Information economy and setization of business create new managerial reality in the industry. If the management practice of the industry by the entities which developed during the pre-crisis period as a subject of management determined the entities and their corporate associations then during this period of transition of the state share blocks to private owners and losses of the main control levers by the state by the specific entities of the industry the chain of the interconnected organizational, scientific and technical and economic modernization managerial iterations in which the entities are independent subjects becomes such subject.

In our opinion, at this stage of development for ensuring strategic upgrade essentially important is a creation, development and support of organizational networks with participation of industrial enterprises, having provided thereby implementation of processes of market self-organization.

Real example of functioning of the network organization is process of creation of industrial parks. The industrial park is the territory which is specially organized for placement of new productions provided with energy carriers, infrastructure, necessary administrative and legal conditions managed by the specialized company.

As obligatory signs of the industrial park: The earth (a type of the permitted use: industrial lands); specialized capital construction projects; engineering infrastructure; availability of managing company; legal conditions (category of the earth, a type of the permitted use of the earth and buildings, availability of coordination with services concerning a fire, ecological safety, observance of the regulations and requirements established by the legislation).

Competitive signs of SP: Geographical proximity of the markets and manpower, presence of financial partners, transport availability, integration of several transport modes (a car, an avia, water), excessive security with energy resources, the simplified order of passing by residents of ministerial and allowing procedures, proximity of housing and a social infrastructure, a possibility of expansion and (or) diversification of production, the advanced engineering decisions and another. At first sight can seem that industrial parks absolutely identical

structures with science and technology parks, technopolises. In our opinion, it is network, simpler for management, than scientifically oriented science cities. This form can be considered as intermediate option between a traditional and synergy management system.

The concept of the Industrial park became active to be used, since 60th years of the last century. The majority of industrial parks in Russia appeared for the last decade and is connected with development of automotive industry and a chemical industry. Unfortunately, their most part appeared in the clean floor ("Greenfield") but not with use of the existing production sites ("Brownfield") and are most often aimed at a construction of new productions by the western companies.

At the moment industrial parks in Russia have no accurate legislatively certain status but there are already first attempts to solve this problem. The Ministry of Economic Development of the Russian Federation in the matter closely cooperates with the association of industrial parks of Russia created recently. According to Association, today in Russia only 25 operating industrial parks ready to accept residents (without the SEZ) and about 70 projectible industrial parks.

The arrangement of industrial parks depends on the markets of products, concentration of the population, transport infrastructure, etc. The vast majority of industrial parks is located in the European part of Russia and in the south of the country. They are practically not beyond the Urals despite the traditional industrial potential and a source of raw materials and it demonstrates that there raw focus of economy remains.

General characteristic of the industrial M-7 park: The developer and the initiator of the project "the industrial M-7 park is LLC fond pryamykh investitsy which gives a strategic and financial support of activities of the park. Prerequisites of creation of the project is the speech in 2008 of the Prime Minister R.N. Minnikhanov at JSC Kazanorgsintez General shareholder meeting and problem definition of increase in conversion of polymers in the territory of the Republic of Tatarstan to 30%.

RESULTS AND DISCUSSION

The industrial M-7 Park of the Republic of Tatarstan which shows many conclusions of our work represents system production, warehouse, office and the trade stand spaces equipped with engineering and information communications. The territory of the Park includes general objects of household infrastructure, office buildings and parking for heavy-load cars.

The park provides the industrial sites (the status of Green land) prepared for building in property, offers services of the project organization (ready project

Table 3: The planned contributions to budgets of various levels “The industrial M-7 park for 2012-2017 without contributions to off-budget funds (rubles)

Variables	Years					
	2012	2013	2014	2015	2016	2017
In the federal budget	23,256,000,00	58,140,000,00	116,280,000,00	174,420,000,00	232,560,000,00	174,420,000,00
In the regional budget	14,175,000,00	35,437,500,00	70,875,000,00	106,312,500,00	141,750 000,00	106,312,500,00
In the local authority budget	360,000,00	900,000,00	1,800,000,00	2,700,000,00	3,600,000,00	2,700,000,00
Total	37,791,000,00	94,477,500,00	188,955,000,00	283,432,500,00	377,910,000,00	283,432,500,00

decisions, individual projects) and real estate development company (a construction of buildings and “turnkey” constructions, documentary providing, acceptance works and commissioning).

Each industrial site of the park is provided with necessary engineering communications: gas supply, power supply, water supply, sewer networks, telephony and internet. All engineering communications in the park centralized at the expense of it are optimized costs for connection to them of each resident.

In the territory of the park the managing company which performs servicing of information and engineering systems works; ensures safety; renders consulting, engineering services; performs a financial and technological brokerage; outsourcing (IT outsourcing, outsourcing of business processes); deals with issues of training, advanced training. Characteristics of the project: the park territory 38 ha; the area of sites for building 30 ha; the area under roads 4 ha (reservation zone width for roads of 25 m); under objects of engineering infrastructure 2.5 ha; a gardening zone 1.5 ha.

One of benefits of the Industrial Park is its arrangement in close proximity to the route M7 (300 m) and to a rail road spur (3-8 km). The route M-7 “Volga” is a part of unique European Route E 22 (Western Europe, the Western China).

Purpose of the investment project: Creation of a material, service, trade and financial infrastructure for education, effective development, interaction of small and medium industrial enterprises in the territory of the Republic of Tatarstan.

Creation of conditions for mutually advantageous cooperation, concentration in the territory of the industrial park of the companies integrated by a financial and technological chain “the investor, the producer of raw materials, the producer of products, the seller”.

Formation of the small and medium innovative scale enterprises in the following areas: Conversion of products of the chemical and petrochemical industry of the republic of Tatarstan; metal working; mechanical engineering. Indicators of social and economic and financial performance of implementation of the investment project including: a contribution to creation of new workplaces for a construction and for operation. Project implementation will provide a population employment increase so for implementation (construction of facilities)

and for the beginning of operation 3600 new workplaces and also on project implementation phase of the 227 th workplace in a construction will be created main financial performance of the project (NPV, IRR, payback period, etc.): the net provided income (NPV) of 317 million rubles; Internal Return Rate (IRR) of 9.9%; payback period of investments (RR) of 7 years; weighted average capital cost of WACC of 8.5%. Contribution to a tax base of the municipality

Additional tax revenues in budgets of various levels for the period of project implementation “the Industrial M-7 Park will constitute about 1,265,998,500 rubles from them in the local authority budget 12,060,000 rubles (Table 3).

CONCLUSION

Summarizing the above, it is possible to conclude that LLC Industrial Park M-7 is a project team where a personnel of various fields of activity (marketing, a technical and operational part, law) led by the project the manager is concentrated (the director of commerce and to a strategic development). However, it is necessary to pay attention that the park is the affiliated organization of the private equity fund. It causes availability of centralization of the main functions in FPI, joint business processes and concord mechanisms.

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