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The Role of Business Incubators in Supporting Economic Growth and Advancement of Small Business of the Russian Federation

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Abstract

The article discusses the role and functions of business incubators in the advancement of small entrepreneurship in the regions of the Russian Federation as well as providing economic growth. A business incubator is an organization that creates the most favorable conditions for launching of small enterprises through the provision of comprehensive services and resources. The article analyses and presents some of the indicators of existing business incubators as well as investigates certain most efficient business incubators in Russia and considers the role of business incubators in the advancement of small innovative enterprises. The authors note the influence of business incubators on economic growth of the regions.

Keywords: Business Incubator, Economic Growth, Small Business, Small Business Advancement

1. Introduction

Business incubators have always created the necessary infrastructure for the development of new business ideas, set the entrepreneurial tone and atmosphere. About 30% of business incubators in Russia are owned by higher education institutions (managed by the University administration or affiliated with the universities). University incubation programs are seen as an important resource for finding and growing talents, and can also be regarded as the center of power that positively influences the economy of the region.

Business incubator is treated by the most contemporary scholars as an economic entity (organization) created to support emergent entrepreneurs. However, there are definitions in which the term «business incubator» is considered more widely. A business incubator is defined also as «a favorable environment, or superior envelope, which protects beginners and aspires managers not having the source material base for the business organization».

The European Commission defines a business incubator as the site of the densest concentration of start-up firms[1], while the National Business Incubation Association (NBIA, USA) interprets it as an instrument of economic development designed to accelerate the growth and successful self-fulfillment of entrepreneurial companies[2]. There is also another definition of «the business incubator as an organization that creates the most favor-

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able conditions for starting development of small and medium-sized enterprises by providing favorable conditions and reducing the cost of various business services due to their shared use"[3].

A business incubator is an organization that creates the most favorable conditions for starting development of small enterprises through the provision of comprehensive services and resources that include the following: providing companies the area on preferential terms, as well as communication means, office equipment, and necessary facilities; providing personnel training, consulting, etc. Availability of broad range of provided services – secretarial, accounting, legal, educational, and consulting is one of the most important conditions, because it is exactly the service comprehensiveness that is very important for launching small enterprises.

Business incubators are an important link in the ecosystem of entrepreneurship support and development.

The «business hatching» process is designed to inspire and provoke people for starting their own businesses and to support start-up companies in developing innovative products. «Business hatching» means the creation of conditions that enable and foster the development of entrepreneurship and start-up companies[4].

2. Materials and Methods

The principles, provisions and conclusions contained in the works of Russian and foreign authors devoted to the problems on evaluation of business incubators activities and small business development in the Russian Federation, as well as legislative acts and normative documents of the Russian Federation and international practices laid the methodological basis of the present study[5].

The issues on building of innovation infrastructure, creation and development of business incubators was seen in the works of the following Russian and foreign authors: etc.

The issues concerning the role and functions of business incubators in the development of small entrepreneurship of the Russian Federation are examined in the works of [6-8].

The present research was carried out applying general scientific methods, conventional statistical methods of information processing and decision making, decision making methods based on the optimization of performance indicators, searching methods, methods of a comprehensive economic analysis of business activity, system analysis, risk assessment methods of economic systems activity[1-20], as well as project management methods.

3. Results and Discussion

The distribution of business incubators over the federal districts of the Russian Federation in general corresponds to the distribution of the population of Russia.

The level of saturation of the Russian districts by the incubation programs makes up on average one incubator per 2 million 700 thousand people.

At the same time, in the USA the saturation by the incubation programs is one incubator per 280 thousand people.

Currently in Russia there are more than 70 business incubators. On average, each of them is supporting 15-20 enterprises with an average workforce of 7-12 people. However, for Russia this number of business incubators is distinctly not sufficient. This is evidenced by the fact that in the world there are about 5000 business incubators[11].

The distribution of business incubators by federal districts of the Russian Federation[13] is presented in (Figure 1).

Most business incubators are situated in Moscow; 22 business incubators include "Digital October", "Strogino" and "Glavstart" business incubators, business-incubator of the Higher School of Economics, and others. The following business incubators are situated in St. Petersburg: a business incubator "Ingria", interuniversity business incubator "QD", and the business incubator of Technopark "Smolenka". Also, 3 business incubators are located in Novosibirsk.

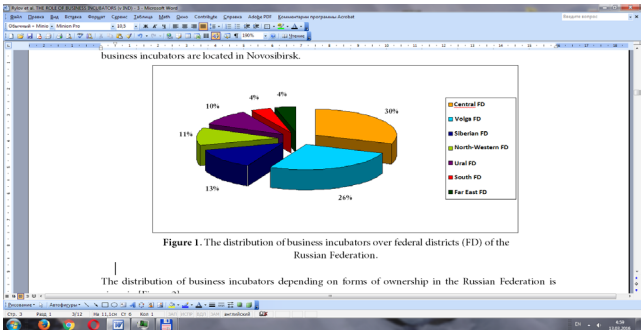

Figure 1. The distribution of business incubators over Federal Districts (FD) of the Russian Federation.

The distribution of business incubators depending on forms of ownership in the Russian Federation is given in (Figure 2).

Figure 3 presents the population size per one business incubator in different federal districts of the Russian Federation (Figure 3).

Most business incubators provide office space and conference rooms for the residents. Generally, the office space is equipped with a basic set of furniture and equipment, the use of which is included in the rent. Less than half of the business incubators have a shared or common public space, and only third of facilities have a canteen, cafe or bar[1]. The lack of such facilities could adversely affect the ability of incubators to develop an ecosystem that provides entrepreneurs with opportunities for informal communication. Laboratory and production facilities are available only in a small number of incubators (19% and 29%, respectively) (Figure 4). These indicators reflect the proportion of residents representing high-tech companies.

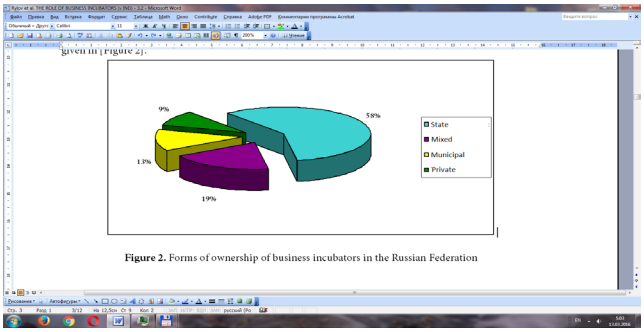

Figure 2. Forms of ownership of business incubators in the Russian Federation

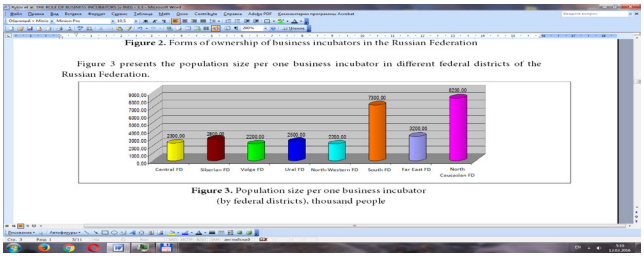

Figure 3. Population size per one business incubator (by federal districts), thousand people

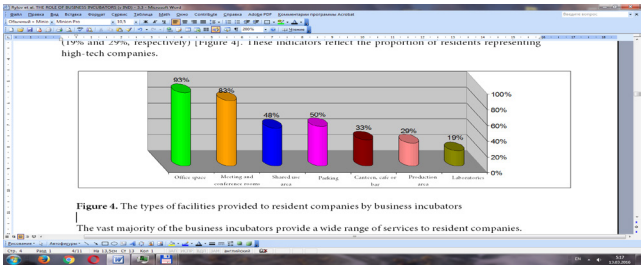

Figure 4. The types of facilities provided to resident companies by business incubators

The vast majority of the business incubators provide a wide range of services to resident companies. Figure 5 presents the main services provided by business incubators to residents for free or on a paid basis (Figure 5). Regardless of the services quality a significant part of the residents' needs can be met by the range of services provided.

At the same time, it should be noted that in terms of the provided services there is a palpable difference between the most successful incubators of Russia and the rest incubators. Each of the five most successful incubators can provide to residents nearly all basic services or assist in the provision of services due to the availability of partnerships with relevant service providers.

The international Universal Business Identifier (UBI Index) was developed to define the most effective business incubators and assess their work and performance.

In the UBI Index of 2015, the main specialization of the incubators was production of the projects in the field of information and communication technologies (39%). Social incubators or social accelerators are a new trend, which holds second place in the profile of the university affiliated incubators (13%). Most of the projects, applying to incubators, are companies at the early seed stage (30%) and start-ups at the level of new ideas (28%).

According to UBI Global 2015, business-incubator of National Research University "Higher School of Economics" became 7th in the ranking of the best business incubators of Europe and was included in the top 25 world leaders in infrastructure among university incubators. This was announced at the regional awards ceremony "UBI Awards in Europe" held in Turin. The business incubator "Ingria" (St. Petersburg) became the 6th in the list of the best European incubators in the category of the university affiliated incubators. The 3rd line in the list of European university accelerators was taken by the business incubator "iDealMachine".

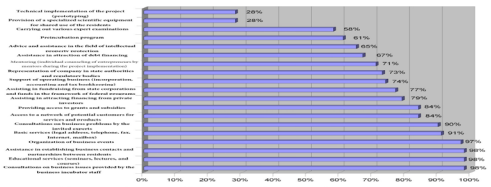

Figure 5. The main services provided by business incubators to residents.

The most successful business-incubators of the Russian Federation and their main activities are presented in Table 1. As is obvious from Table 1, just one of the five most successful business incubators (business incubator "Ingria") was created beyond an academic environment within the structure of technological cluster, i.e. most of the noted associations at present are actually operating within university structures that significantly narrows the specialization and focus of projects that can be incubated.

The main performance indicators of the business incubator may include not only the number of attracted investors and total amount of investments, but also enterprises established at the business incubator (business incubators residents).

Analyzing the experiences of creating the first business incubators in Russia at the assistance of federal agencies, it can be concluded that business incubators create optimal conditions for launching and development of small businesses at the initial stage. According to the nonprofit partnership "National Union of Business-incubators", among small enterprises starting their activities independently, no more than 30% survive, while in the business incubators this figure is about 80%.

Enterprises that have passed the incubation process are more resilient and prepared to operate in the market economy conditions. The function of growing new organizations in the business incubators is particularly important for regions, where the number of small businesses is currently declining.

Also business incubators, solving the problem of employment, encourage economic activity, contribute to the development of the domestic market, and expand the tax base of the region.

Business incubators allow directing the activities of small enterprises toward the economic areas, which are priority for the region and the municipalities that will contribute to solving economic and social problems of the region.

Establishment of small technology firms on the basis of business incubators will enhance the innovative activity of businesses in the region, the implementation of new technologies, use of innovation to solve problems in ecology, medicine, housing and communal services, as well as in other areas supervised by the regional authorities.

Special attention should be given to business incubators in the context of launching small innovative enterprises in the regions of the Russian Federation.

Table 1. The most efficient business incubators of the Russian Federation

Name	Year of foundation	Main activities
Business incubator of the Academy of National Economy	2010	Organization of the sessions to attract potential investors; Financing of the project participation in trade fairs and specialized events; Payment for patenting and incorporation; Research funding.
Business-incubator of National Research University "Higher School of Economics"	2006	Financing of startups from the Higher School of Economics; Promotional events; Promotion of incubator projects at exhibitions.
Incubator «Ingria» (on the basis of St. Petersburg Technopark)	2008	Project support, including lobbying in power structures; Projects examination; Development of intellectual property protection plan; Assistance in the production organization; Using the affiliate network.

Business incubator of Moscow State University	1990	Support by the British Council and the Fund for Assistance to Development of Small Enterprises in Scientific-and-Technical Sphere; Organization of webinars.
Incubator of Plekhanov Russian University of Economics	2009	Promotion of services and products of startups; Marketing and research activities; Conducting surveys and appraisals; Introduction of the innovative educational technologies, tested in the Russian University of Economics, into the university educational process

Small innovative enterprises are an important component of any national innovation system.

These enterprises often fulfill the final stages of a full innovative cycle, joining to the innovative product development process at the commercialization stage[5]. At that, Small Innovative Enterprises (SIE) can operate completely independently, developing and implementing their own marketing strategy, or in the framework of cooperation strategy with one of the economic agents of the following types:

Research universities and centers. In this case, small innovative enterprises are most often established as spin-off companies at large universities and are "companies based on a same product/technology" engaged in the commercialization of university developments, which not require large financial investments.

Large innovation-active company. Usually a large company gives small companies to outsource certain activities, including carrying out applied and experimental research, reserving a function of the system integrator[10].

Other small and medium-sized innovative enterprises. Within the cooperative strategies, small and medium-sized enterprises cooperate with each other at any stage of the innovation process to improve competitiveness and reduce the risks of innovative activity. Cooperation can take many forms, such as for example, the strategic alliance, cooperative research, cooperative production or cooperative marketing[11].

In the case of the organization of the business incubator by major university or research center, a priority in its development becomes as a rule the commercialization of scientific and technical developments of scientists on the basis of small innovative enterprises, created specifically for this purpose. Often the university or research center is a co-founder of small innovative enterprise, contributing a certain share into the ownership capital either by monetary resources or intangible assets. Reducing the risks for small innovative enterprises is achieved through the use of scientific potential of the research center, its experimental and laboratory base, social relations as well as concessional financing of innovative projects, preferential payment for leased office and manufacturing space, consulting and other services. Besides, some business incubators provide assistance in drawing up business-plans, offer charge-free consulting and education services that helps enterprises to significantly reduce the risks at the stage of their formation and the business start.

To date, the most urgent issue consists in creation of business incubators at the regional and interregional levels, which would be able to unite companies and projects operating in various fields and branches of science, technology and production, integrated into a single regional innovation infrastructure.

Regional business incubator projects are currently implemented on the territories of Omsk, Murmansk, Arkhangelsk, Yaroslavl, Rostov, Kirov, Penza, and Chelyabinsk regions, Krasnoyarsk and Krasnodar territories, republics of Kabardino-Balkaria, Tatarstan, Bashkortostan, Mordovia, etc.

Intra-regional focus in business incubators activities ensures sustainable development of created companies after leaving the incubator due to their ability to constantly adapt to changing economic conditions of the region, self-development, and the ability to create a business environment within the economic cluster.

A business incubator must consider current conditions and make full use of the potential of the region.

4. Conclusion

Business incubators are special tools of economic development designed to accelerate growth and successful self-actualization of entrepreneurs, businesses and companies by providing them comprehensive resources and services to support and develop their business activity.

Entities of the Russian Federation need business incubators with a variety of functional purposes and range of services.

The creation of companies based on the business incubator contributes to the development of small entrepreneurship in the regions as well as production growth.

In general, the regions, implementing projects on creation and development of business incubators, pursue the following objectives: solving employment problems, engaging the population in small business, contributing to growth of small enterprises, providing relationships between small businesses and large industrial enterprises, as well as providing advisory services, creating conditions for communication and transfer of best practices to entrepreneurs, and ensuring interaction with partners.

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