

**FORMATION OF SUPPORT FOR SMALL ENTERPRISES IN THE PROCESS OF BUSINESS INCUBATION WITH THE APPLICATION OF LOGISTIC CHAINS**

Inna Matveeva; Ekaterina Khomenko

*doi:10.22306/al.v5i1.85**Received: 22 Mar. 2018**Accepted: 27 Mar. 2018***FORMATION OF SUPPORT FOR SMALL ENTERPRISES IN THE PROCESS OF BUSINESS INCUBATION WITH THE APPLICATION OF LOGISTIC CHAINS****Inna Matveeva**Kalashnikov Izhevsk State Technical University, 7 Studencheskaya St., Izhevsk, 426069, Udmurt Republic, Russian Federation, inna.matweewa@gmail.com (corresponding author)**Ekaterina Khomenko**Kalashnikov Izhevsk State Technical University, 7 Studencheskaya St., Izhevsk, 426069, Udmurt Republic, Russian Federation, ekaterina_izh@mail.ru**Keywords:** support of small enterprises, information and analytic instruments, logistic chains, business incubation

Abstract: In this article the content of information and analytic support for small businesses is disclosed, the specifics of using information and analytic instruments such as consulting, training, expert support, event-monitoring are described, and improvement of the provision of information and analytic services through remote and complex rendering of these instruments in the form of online support. The purpose of this article is to develop practical recommendations for improving the support for small business in the business incubation process taking into account the trends in the formation of the information economy. One of the most effective institutions for supporting small business is the formation of a network of business incubators. The problem of absence or the complexity of obtaining information and analytic services due to weak interaction between a small enterprises and a business incubators was investigated. We propose to develop an IT complex, which includes a database of existing business incubators and relevant information and analytic instruments for support small enterprises. This complex is based on the remote interaction of small enterprises and business incubators. Getting a remote information analytic service can be considered as a logistical process of delivering a service to the small enterprise. Remote application of a complex of information and analytic instruments will contribute to the following results: improving the quality of providing infrastructure support; expanding the cooperation of the business incubator with scientific organizations; development of a positive image of the business incubator; improving the interaction of small enterprises and business incubators.

1 Introduction

In the economy of a new type informatization of entrepreneurial activity is the dominant trend. The process of formation of the information economy proposes the organization of an appropriate support for entrepreneurship. The development of support for entrepreneurial activity in turn demands improvement of the structure, functions, methods and instruments of support for small business [1-3]. Implementation of the process for improvement of infrastructure support can be performed through the use of information logistic chains.

The purpose of this article is to develop practical recommendations for improvement the support for small business in the process of business incubation taking into account the trends in the formation of the information economy.

One of the most effective institutions for support of small business is the formation of a network of business incubators. In particular the business incubator makes the

opportunities, first, to lay the basis for a new generation of small business entities, secondly, to support already working entrepreneurs and, thirdly, to solve many social and economic problems at the regional level.

The relevance of the development of the system of business incubators is provided for the use of effective instruments to support of small business. Having become wide spread in the West, business incubators today become one of the most effective institutions in the support system for small business in Russia [4]. In the framework of implementation of the organization, information and analytical functions of the business incubator, it is possible to define the structure of information and analytic instruments with which the business incubator is able to give a certain type of support to small businesses (Figure 1). An information and analytic instrument is understood as a set of implemented information and analytic services provided by business incubators in the framework of support for small businesses and grouped according to their functional purpose.

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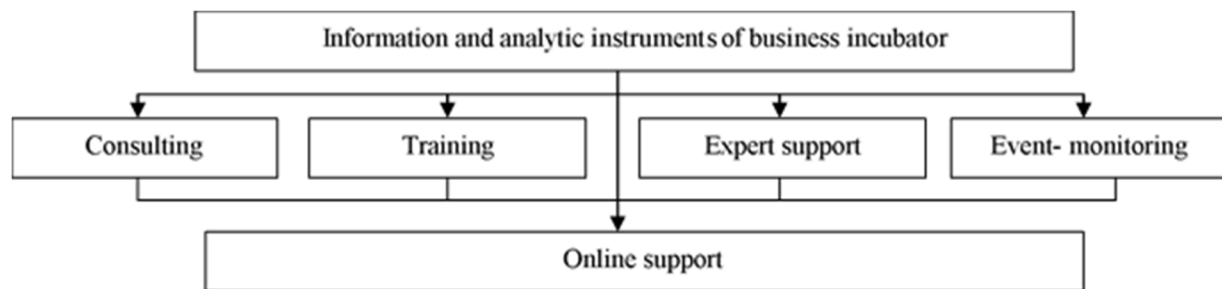


Figure 1 Information and analytic instruments of support for small enterprises given by business incubators

Mutual problems in the use of information and analytic instruments are:

- lack of qualified personnel in the business incubator; there are specialists in different branches of knowledge, and by implication, a narrow range of topics in the framework of consulting and training of small enterprises named residents of business incubator [7];
- a low level of information and technical support for business incubators, that leads to the inability to use qualitative these information and analytic instruments;
- lack of work on forming the image of a business incubator as a key institution of small business support. First, it is the lack of one's own website and publicity of business incubators; secondly, the lack of a quality monitoring system of support to small enterprises;
- the lack of remote cooperation between small enterprises and business incubators, that put the onus on a small enterprise to be a physical resident of a business incubator (that is to rent an office / room / equipment within the walls of a business incubator).

In the framework of development of information and analytic support for small enterprises it should formulate the next basic tasks aimed at the integrated use of the aforementioned instruments:

- expanding the cooperation of the business incubators with research institutes, universities, industrial enterprises and other support institutions (technology parks, investment centres, etc.) to receive methodological and scientific support, access to research results and specialized equipment, as well as attract expert (employees of research institutes, teachers of universities, employees of state institutions and organizations, experts of financial and credit organizations);
- development of a positive image of business incubators by promoting their services (publicity, inviting potential exhibitors, organization thematic conferences, seminars and webinars, master classes and creating a firm style);
- development of new thematic ways of consulting, training and expert support for small enterprises;
- creation of remote collaboration, incl. establishment of feedback between residents and business incubators by applying information and analytic instruments in a complex, for example, as a single IT complex.

That way, the central and perspective task of improvement information and analytic support of small business is the use of information and analytic instruments remotely and in its entirety. By means of it the business incubator will be able to increase the number of incubated small enterprises, thereby to contribute to their successful development in the early stages of their entrepreneurial activities.

2 Methodology

The research of the interaction of business incubators and their residents made it possible to identify a set of problems of providing information and analytic support to small enterprises. One of the key problems is the lack (for most business incubators) or the difficulty of obtaining information and analytic services due to the weak interaction between the small enterprises and the business incubators.

We propose to develop an IT-complex that includes a database on working business incubators and their corresponding information and analytic instruments for supporting small enterprises. This complex is based on the information-remote interaction of small enterprises and business incubators, by means of it the efficiency and complexity of the provision of services is achieved [5,6].

Getting a remote information analytic service can be considered as a logistical process of delivering a service to the end user - a small enterprise. It is important to build a logistics chain of the process of obtaining information and analytic services by a small enterprise in the process of business incubation. Figure 2 shows the logistics chain for obtaining information and analytic support for a small enterprise.

At the first stage, a small enterprise formulates an actual problem and searches for an information and analytic service that contributes to its solution. At the second stage, a small enterprise analyses the existing list of working business incubators and, based on the rating of the support institute, chooses the best business incubator for it. In the third stage, the selected business incubator assesses its existing potential for information and analytic infrastructure support instruments and identifies a specific specialist who will be responsible for providing information and analytic services at the fourth stage. In the absence of the necessary expert, an outside specialist (the

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fifth stage) can be recruited in the state of the business incubator, ready to provide the information analytic service of proper quality (the sixth stage).

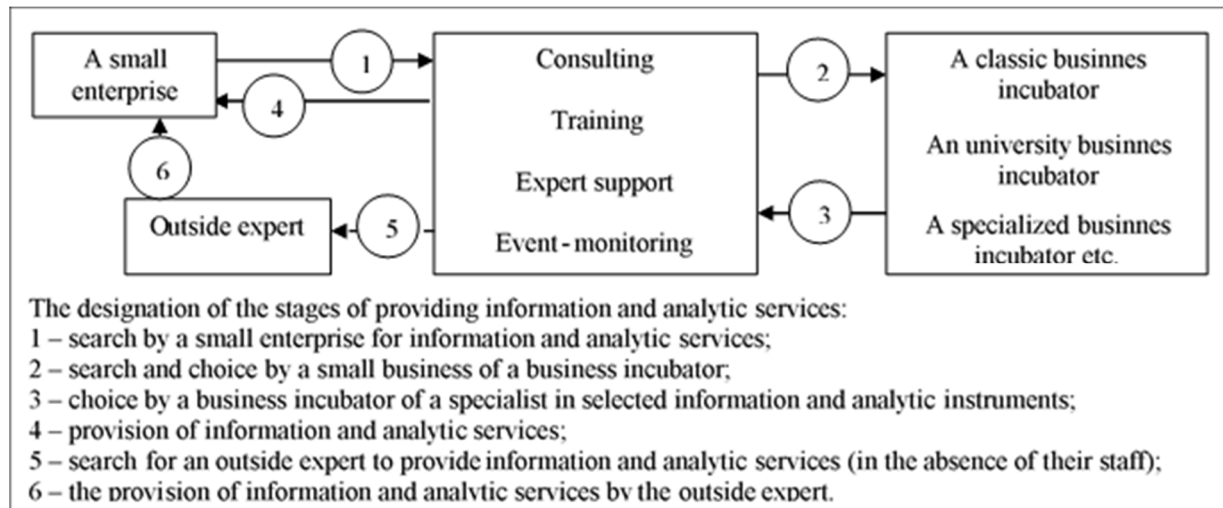


Figure 2 A logistic chain of provision of information and analytic services in the process of business incubation

The logistics chain of the information and analytic service presented in Figure 2 is of a simplified nature. In addition to assessing the needs of a small enterprise in a certain service and the available information and analytic potential of a business incubator, it is necessary to determine the quality of the service provided for the further improvement of information and analytic support.

3 Result and discussion

The introduction of information-distance interaction in the business incubation process will yield the following basic results:

- a) for a small enterprise:
 - simplification and acceleration of the procedure for obtaining information and analytic services through informatization of the business incubation process;
 - the possibility of obtaining services online without a territorial link to the business incubator;
 - improvement of current indicators of the development of the enterprise;
 - transaction costs cut;
- b) for a business incubator:
 - improving the quality and speed of providing information and analytic support through the development of competition between business incubators and rating the provision of support to small businesses;
 - popularization of the business incubator as one of the key institutions of support for small business;
 - increased incubation of small enterprises;
- c) for the region and country:
 - growth of entrepreneurial activity among the population;
 - increasing the number of small enterprises as a result of improving their support quality.

The proposed recommendations for improving the support of small business in the process of business incubation will allow complex and remote use of information and analytic instruments in the form of a supply chain presented in Figure 2.

4 Conclusions

The formation of the information economy and the processes of informatization of entrepreneurial activity directly affect the organization of support for small businesses. Increasing the role of the information and analytic component determines the need for remote and complex use of information and analytic instruments through online support of small enterprises. Such support is possible if there is an IT complex of information and analytic instruments functioning in the country's territory. This complex is a list of information and analytic services provided by working business incubators.

The remote application of a complex of information and analytic instruments (consulting, training, expert support and event-monitoring) will be able to reveal following results:

- improving the quality and speed of providing support for small enterprises;
- expanding the cooperation of the business incubator with scientific organizations in order to attract outside experts;
- development of a positive image of the business incubator as one of the key support institutions;
- improving the interaction of small enterprises and business incubators, incl. establishment of feedback.

That way, the formation and development of the information economy in Russia requires the improvement of institutions regulating economic relations in the

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information sphere, in the support of business processes [1,2], which determine the transformation processes in all subsystems of the business infrastructure.

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