Conceptual Model of Entrepreneurship Support

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Abstract—Entrepreneurship is an innovative risky business during the phases of the life cycle of origin and growth - to conquer the market by better satisfying consumer needs for entrepreneurial income. Innovative risk business is in organic relationship with the routine type of business in the phases of maturity and decline, designed to keep the market and ensure the return on investment. The motivation for entrepreneurship is, in essence, the motivation for innovative activity for the delivery of new goods and services to the market. A favorable entrepreneurial climate created within the framework of state regulation and entrepreneurship support with the aim of producing competitive products, import substitution, increasing export potential, and economic growth is an institutional condition for business revitalization. Business development on the basis of state regulation and support of entrepreneurship forms a certain model, consisting of a set of organizational and economic blocks: management entities, management objects (business enterprises), measures of state regulation and support of entrepreneurship in four types, management methods and tools, costs of creating a favorable business climate, socio-economic benchmarks, entrepreneurship activity, socio-economic indicators of business activity and monitoring the state of society. The blocks of the model, interacting with each other, lead the entrepreneurial business to the desired state, determined by the totality of socio-economic landmarks.

Keywords: innovative business, entrepreneurship, business model, favorable business climate

I. INTRODUCTION

Entrepreneurship is an innovation-driven business. As part of entrepreneurship, a business creates a new or improved product and new markets. As part of the routine business, the market is saturated with goods of a certain type using technical, organizational and managerial decisions created within the framework of entrepreneurship and innovation. As the market is saturated with a certain type of product, there is a drop in demand and a decrease in the profitability of firms that adhere to a routine behavior. Then entrepreneurship becomes relevant in order to re-create something new. This problem is pointed out by I. Ansoff, who rightly asserts that “the frequency of problems of survival is determined by the period of the life cycle of the technology used and the demand for their products” [1].

According to J. Schumpeter, innovation is a new scientific and organizational combination of production factors motivated by an entrepreneurial spirit [2]. Developing the ideas of the great representative of the Austrian school of economists J. Schumpeter and taking into account the definition of entrepreneurship given by us as an “innovative type of business”, we express the judgment that innovation is an inalienable essence of entrepreneurship.

We hold that entrepreneurship and innovation are two interrelated categories. Where there is entrepreneurship, there is innovation. Entrepreneurship is impossible, from our point of view, without innovation and vice versa.

Governmental regulation and support for entrepreneurship, as well as all economic phenomena in modern society creates necessity in the purposeful impact in the right direction necessary for society. From our point of view, governmental regulation and encouragement of entrepreneurship is a systemic impact on the business in the right direction for the company, using appropriate methods and tools. Fig. 1 shows the business model of regulation and support of entrepreneurship.
Fig. 1. Conceptual model of entrepreneurship development

Governmental regulation and support of entrepreneurship is a continuous process of business impact. With the dotted lines in the concept are shown feedbacks that adjust exposure, provided by management subjects, including adjustment efforts, types, methods and instruments of government influence, if business develops in the wrong direction for the company and does not reach the planned targets.

Feedback operate when landmarks are achieved. This means that the company is capable of challenging new directions in business and use new types, methods and tools of governmental regulation and business support.

II. METHODS

We analyze each of the block that we have developed a conceptual model. Block 1: At the governmental level entities which are in charge of regulation and business support are the executive authorities of the Russian Federation and of the regions (Fig. 2) [3]. Entities providing regulation and support of entrepreneurship at the municipal level are local authorities.

Each of the above levels (Fig. 2) affects the business, regulating and supporting entrepreneurship, according to four main types: promotion, partnership, control, redistribution of resources (Fig. 1, blocks 2, 3, 4, 5).

Fig. 2. Subjects of control that implementing state regulation and support of entrepreneurship

Within the framework of state regulation business support is carried out by a number of laws, decrees, regulations of federal and regional authorities. For the federal government, regions and municipalities, regulating and supporting entrepreneurship, business enterprises are objects (Fig. 1, block 9). They are focused by the subjects. Consequently, business enterprises are objects of governmental regulation and business support. At the same time the business enterprises conduct specific policy for the development of entrepreneurship. They develop new markets, new technologies and products, carry out modernization and reconstruction of production, perform risky innovations. Thus enterprises of business act at the same time as objects and as subjects pursuing policy of development of business entrepreneurship.

Block 6 contains the concept of tools and methods of state regulation and support of entrepreneurship [13]. Methods of governmental regulation and support of business from our point of view are identical to the methods of governmental regulation of economy, which are represented in the diagram (see Fig. 3) [3, 4, 6, 8, 9, 10, 11].

Fig. 3. Methods of state regulation and business support

Taken together legal and administrative methods, the most favorable are conditions for entrepreneurship and law regulation.

Economic methods are divided into three groups. Financial practices of entrepreneurship include concessional lending, access to investment resources, subsidies, co-financing. Equally important are tax practices, judicious use of which contributes to the expansion of business. Resource methods are staffing, including training and retraining, information support, including participation in exhibitions, conferences, trade fairs and access of enterprise business to material resources [16, 17].

Combination of organizational, economic instruments of governmental regulation and support of business affecting activation of business is shown in the diagram (see Fig. 4) [3, 4, 5, 7, 12, 14, 15].

Fig. 4. Organizational and economic development tools and system of state regulation of business support
It is presented a set of tools forming a conceptual model of governmental regulation and support of entrepreneurship.

Block 7 concepts (Fig. 1) reflect the costs of financial, material, intellectual and information resources devoted to the creation of a favorable business climate [5]:

\[ I_F = \sum I_\beta \]

(1)

where \( I_F \) - The amount of investment in the creation of a favorable business climate;

\( I_\beta \) - cost funds \( \beta \)-th direction on the creation of a favorable business climate;

\( \beta \) varies from 1 to \( w \), where \( w \) - number of areas the costs of creating a favorable business climate (science, innovation, infrastructure, etc.).

Block 9 of the concept (see Fig. 1) characterizes the entrepreneurial business activity predetermining institutional environment, control measures and support entrepreneurship. The objective function of entrepreneurial activity is defined as follows:

\[ B^I = \left( \sum (\alpha_i \times B^i) / \sum \alpha_i \right) \rightarrow \max \]

(2)

where \( B^I \) - actually made an integral indicator of socio-economic development of society, defined by the sum of separate lines of development, taking into account their weights;

\( \alpha_i \) - preference factor of \( i \)-th landmark in points on a scale from zero to ten;

\( B^i \) - actually reached value of \( i \)-th landmark, \( i \) varies from 1 to \( n \), \( n \) is the number of landmarks.

Preferences reflect the political will of the leadership of the country or region, and their priorities, values, and pre-election commitments to the electorate. In addition to the integral index, which reflects the socio-economic development of the country, the concept of governmental regulation and support of business includes the objective function in order to achieve the maximum value for each of the development targets.

\[ B^i = \left( \sum (\varphi_j \times B^j) / \sum \varphi_j \right) \rightarrow \max \]

(3)

where \( B^i \) - actually achieved level indicator for the \( i \)-th landmark;

\( B^j \) - actually achieved level of the \( j \)-th private index of \( i \)-th landmark;

\( j \) varies from 1 to \( m \), \( m \) - the number of terms of private performance of a benchmark;

\( \varphi_j \) - achievement of the \( j \)-th landmark.

The objective function of regulation and business support (3) is to maximize the development of the national economy for a variety of benchmarks including factors preferences. Priority targets of government regulation and business support is not the same in nature, besides they reflect the most pressing problems facing society at any given historical period of social development. Therefore, prior to each benchmark we introduce preference factor which is in the range of zero to ten. Preference coefficients are set by the expert.

Block 11 concept (Fig. 1) provides for assessment of the business climate favored [5, 6, 18, 19, 20]. The objective function of a favorable business climate is as follows:

\[ G = \sum G_i \rightarrow \max \]

(4)

provided that:

\[ G_i > \sum I_\beta \]

(5)

Condition (5) means that the overall economic effect (\( G \)), achieved a business from entrepreneurial activity must exceed the costs (block 7) to create favorable treatment (\( \sum I_\beta \)), where \( G \) - the cumulative economic effect of creating favorable business climate;

\( G_i \) - economic (commercial) the effect of the \( i \)-th enterprise from business activity caused by favorable treatment, \( i \) varies from 1 to \( n \), \( n \rightarrow \max \), \( n \) – the number of enterprises (increase in the number of enterprises is caused by a favorable business climate).

III. RESULTS

Subjects of controls (1) [5] responsible for the socio-economic condition of the society monitor internal and external environment (block 11) identify those aspects of social life that are in the worst condition or those aspects that require more intensive development. They purposefully form a favorable climate, orienting entrepreneurial activity of business in the direction necessary for society.

In the presence of numerical indicators, the future state of society on a particular benchmark is given a set of socio-economic indicators (block 8) the objective function is to minimize the deviations of the actual state of the benchmark:

\[ \Delta B^i = \left( \sum \alpha_i (B_i - B^i) / \sum \alpha_i \right) \rightarrow \min \]

(6)

where \( \Delta B^i \) - deviation of actual progress of the integral index of the benchmark;

\( B_i \) - digital indicator perspective values of the \( i \)-th socio-economic benchmark;

\( B^i \) - actually reached value, \( i \) varies from 1 to \( n \), \( n \) - the number of landmarks.

\[ \Delta B^i = \left( \sum \varphi_j (B^j - B^j) / \sum \varphi_j \right) \rightarrow \min \]

(7)
where $\Delta B_{ij}$ - the deviation of actual performance achieved by the planned value of the $i$-th landmark;

$B_{ij}$ - promising value of the $j$-th private index of the $i$-th landmark;

$B'_{ij}$ - actually made level for the $j$-th private indicator of $i$-th landmark.

IV. CONCLUSION

Entrepreneurship is a business characterized by innovation. The overarching goal of state regulation of entrepreneurship is to create the most favored nation treatment for the initiatives and creative activities of citizens and legal entities in organizing production on an innovative knowledge-based basis, to ensure full employment of the population and a high standard of living.

The conceptual model we developed is designed to achieve socio-economic development guidelines by encouraging entrepreneurial activity in the direction necessary for society, creating a favorable entrepreneurial climate. The model implements the objective functions of maximizing socio-economic indicators and minimizing deviations from the guidelines for the development of the national economy, taking into account preference coefficients determined by the country’s priorities at any given time. Through monitoring the state of society, feedback is provided that corrects both the guidelines themselves and the efforts aimed at entrepreneurial activity of the business. Thanks to the multiple repetition of this cycle, economic growth and development of society is achieved.

REFERENCES

[1] I. Ansoff, "Strategic management", Strategic Management, 2016, pp. 1–236.
[2] J. Schumpeter, "Theory of economic development", M.: Eksmo, 2007, 864 p.
[3] S. G. Demchenko and G. R. Sibava, "Business: problems and conditions of [4]development: the monograph", Ryazan: Kontseption, publishing house, 2014, 108 p.
[4] I. I. Ishmuradova and G. R. Sibava, "The tools improving the effectiveness of management system of enterprise", Academy of Strategic Management Journal, 2016, 15, is. Special Issue, pp. 34–39.
[5] G. R. Sibava, "Categorization of favorable enterprise climate", Journal of Economics and Economic Education Research, 2016, vol.17, is. Special Issue, pp. 45–50.
[6] A. I. Shinkевич, F. F. Galimulina, V. O. Moiseyev, V. V. Avilova, K. S. Kuramshina, I. I. Ishmuradova, L. A. Ponkratova, and V. L. Granke, "Features of integrative relations between science, state and industry in Russia and abroad", International Review of Management and Marketing, 2016, 6 (2), pp. 142–148.
[7] I. I. Ishmuradova and G. R. Sibava, "Digital conversion of business processes as the process of organizational changes of the entrepreneurship in innovation economy", Science of Krasnoyarsk, 2016, 5 (6-2), pp. 92–97.
[8] A. R. Miftakhova, G. R. Sibava, D. M. Lysanov, and A. N. Karamyshev, "Development of the online monitoring system of public transport", Journal of Advanced Research in Dynamical and Control Systems, 2018, 10 (13 Special Issue), pp. 541–546.
[9] S. A. Karimov, G. R. Sibava, I. I. Eremina, and A. N. Karamyshev, "Method of introducing the multidimensional concept of authorization SAP BW", Journal of Advanced Research in Dynamical and Control Systems, 2018, 10 (13 Special Issue), pp. 536-540.
[10] S. Kraus, N. Roig-Tiermo, and R. B. Bouncken, "Digital innovation and venturing: an introduction into the digitalization of entrepreneurship", Review of managerial science, 2019, vol. 13, is. 3, pp. 519–528.
[11] M. S. Kazaeva, G. R. Sibava, A. G. Isavnin, and A. N. Karamyshev, "The bank's financially stable supply chain as the basis for attraction of investors", International Journal of Supply Chain Management, 2018, 7 (6), pp. 540–543.
[12] S. Nambisan, M. Wright, and M. Feldman, "The digital transformation of innovation and entrepreneurship: Progress, challenges and key themes", Research Policy, 2019, 48 (8 Special Issue), art. 103773.
[13] T. G. Antropova, I. I. Ishmuradova, V. N. Minsabirova, F. S. Gazizova, and R. R. "Ferumbutalov, Economic security in the conditions of innovative transformation of economy", Review of European Studies, 2015, 7 (1), pp. 195–199.
[14] T. I. Klimenko, A. I. Shinkевич, S. S. Kudryavtseva, M. V. Shinkevich, N. V. Barsegyan, A. A. Farrakhova, and I. I. Ishmuradova, "Modeling factors of environmental tourism development in innovation economy", Ekologiya, 2018, 27 (106), e106153, pp. 263–269.
[15] A. I. Shinkevich, T. V. Malysheva, E. N. Ryabina, N. V. Morozova, G. N. Sokolova, I. A. Vasilyeva, and I. I. Ishmuradova, "Formation of network model of value added chain based on integration of competitive enterprises in innovation-oriented cross-sectoral clusters", International Journal of Environmental and Science Education, 2016, 11 (17), ijese.2016.746, pp. 10347–10364.
[16] A. Z. Gafiyatullina, T. V. Nikonova, S. G. Vagin, R. R. Kharisova, E. I. Pavlova, R. R. Khayrutdinov, I. I. Ishmuradova, "Organization of controlling the intellectual potential of company personnel", Review of European Studies, 2015, 7 (4), pp. 13–19.
[17] A. A. Lubrina, M. V. Shinkevich, S. I. Ashmarina, N. A. Zaitseva, G. B. Say过户ina, and I. I. Ishmuradova, "Resource saving innovative forms of the industrial enterprises", International Journal of Economics and Financial, 2016, issues 6 (2), pp. 479–483.
[18] M. V. Shinkevich, A. I. Shinkевич, A. D. Chudnovskiy, I. V. Lushchik, G. N. Kaigorodova, I. I. Ishmuradova, S. A. Bashkirtseva, L. V. Minina, and T. A. Zhuravleva, "Formalization of sustainable innovative development process in the model of innovations diffusion", International Journal of Economics and Financial, 2016, issues 6 (1), pp. 179–184.
[19] S. S. Kudryavtseva, A. I. Shinkevich, A. V. Pavlova, A. D. Chudnovsksy, A. N. Nikolayeva, G. R. Garipova, F. K. Doronina, and I. I. Ishmuradova, "Econometric methods for evaluating of open national innovative systems", International Journal of Economics and Financial, 2016, issues 6 (2), pp. 640–645.
[20] I. I. Ishmuradova and A. M. Ishmuradova, "Stochastic modeling of economic activity of costs on Innovation of the organization of the Republic of Tatarstan, in the formation of business processes", Revista Publicando, published 2017, vol. 4, issue 13, pp. 545–559.