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Peculiarities of Modelling Operation of a Business Venture

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ABSTRACT: The global experience of leading companies shows that the successful development of any firm, including business ventures, as well as its increasing effectiveness are impossible without an explicit strategy being a set of measures aimed at achieving some goal. The relevance of this work lies in the fact that the activity of any company and that of a business venture in particular involves risks. In light of this, there is a need for strategy development and its application within the competence of various departments. The article attempts to research and develop a strategy for a business venture. The business functions in a highly competitive environment. Adequate decision-making requires an in-depth comprehensive assessment of the situation and a reliable forecast of events. The main stages of a business venture's operations have been defined, the possible alternatives of strategic choice have been identified, and problems of a business venture have been defined with appropriate solutions being suggested. The methods of research used in this work include cognition, retrospective and documentary analysis, as well as synthesis, generalization, and systematization.

Keywords: business venture, business, innovation, services, risks.

I. INTRODUCTION

A business venture is an enterprise whose product is considered to be risk-bearing innovation of various kinds, namely in the field of research, technology, organization of new products, production design, and marketing.
A business venture is the initial stage of product design. It is engaged in the selection and development of scientific and technical ideas and their testing, as well as the formation of models and samples, which are then introduced into the industrial production. After the product is finished, the venture often ceases to exist [1].
Business ventures fall in the category of small and medium-sized innovative enterprises with up to 500 employees.
In Russia, business ventures are only starting to emerge. The first fair took place in 1999, with 23 projects being presented and 17 projects drawing investors' attention.

II.LITERATUREREVIEW

Business ventures play the role of interim organizational structures formed to solve specific problems. Such companies are classified as highly active, which is caused by the direct personal interest of the company's employees and business partners in the successful commercial implementation of ideas, technologies, and inventions at the lowest cost possible [2].
Business ventures are founded on a contractual basis using the money obtained through the consolidation of funds, obviously, of several legal entities or individuals (or both at the same time), or through investments and loans granted by large companies, banks, private funds, and the state [3].
Venture capital financing is a special kind of high risk because direct investment is made in exchange for a share of the company stocks, which is only based on the belief in the success of the venture activities and the lack of criteria for in-house research and commercial implementation of the technology [4].
Investing in venture capital implies investing without any guarantee or financial support granted by business ventures [5]. Small business ventures are engaged in scientific research with subsequent transformation of ideas into new technologies and products [6].
At present, the role of small enterprises in studies and research has increased considerably. This fact is conditioned by the technological revolution that let small and medium-sized innovative high-tech companies use modern technologies corresponding to their size– microchips, microcomputers, allowing to produce and develop highly engineered products requiring relatively affordable costs [7].
Such an enterprise is often initiated by a small group of people, including talented engineers, inventors, scientists, change managers who want to dedicate themselves to the study of ambitious ideas and at the same time avoid restrictions, inevitable in the laboratories of large companies with their orderly business plans. This method of research system allows applying extensively the potential of researchers free from bureaucracy in this case [3].
Venture companies somehow provide security for young businessmen at the initial stages of innovative structure developing when the novelty of scientific or breakthrough ideas fails to be appreciated by company executives [4].
The advantages of business ventures are their flexibility, mobility, susceptibility to swiftly reorient and modify the search settings, quickly analyze and try out new ideas.

These firms are more likely to succeed towards profit and competition, implement directly established tasks and strict deadlines effectively in the course of intensive research process [2].

Large companies, having expensive equipment and stable positions in the market, do not tend towards rearrangement of production and various experiments. It is much more profitable for them to fund start-ups and, if they succeed, to follow this well-trodden path [5].

There is a set of regulations defining venture capital financing, but they all boil down to its main purpose, that is to promote the growth of a certain business by providing a specific amount of money in exchange for a share in the authorized share capital or a certain block of stock [6].

The venture capitalist, who is the investor that leads the transaction, does not invest his or her own money in the company whose shares he or she acquires [4]. The venture capitalist is an intermediary between groups of investors and entrepreneurs. This is one of the key features of this type of investment [8].

On the one hand, the venture capitalist independently decides on the choice of investment medium. He or she has an active role in the Board of Directors and contributes to business expansion of a particular company. On the other hand, it is the Investment Committee that represents the interests of investors, and makes a conclusive decision on the investment medium [10]. After all, the return does not belong to the venture capitalist peculiarly, but to the fund's investors. The venture capitalist is only entitled to a share in the profit [2].

The development of new venture capital funds, despite more than 30-years of experience, remains challenging for the world, mainly because of the inadequacy of national legislation towards both emerging and mature capital markets [6].

The Russian legislation lacks the rules that control the activities of venture funds and companies. All the funds operating within the Russian Federation and beyond are not registered in Russia [7].

Regional funds of the European Bank for Reconstruction and Development along with the equity funds are facing several problems at both the federal and local levels. The inward investment is maintained by the existing legal framework and the tax system. It is accompanied by poor infrastructure, an underdeveloped financial system with government over-regulation, etc. Therefore, it would hardly be possible or appropriate to expect a national Russian venture capital structure to form shortly [9].

The vast majority of funds operating in Russia have been founded either directly by international companies (regional venture funds and equity funds comprising the stocks of small businesses under the European Bank for Reconstruction and Development) or by national funds within intergovernmental agreements [3].

Private venture funds are still rare in the Russian market. The value of the funds ranges from several million to several hundred million dollars.

III. PROPOSED METHODOLOGY

A. General description

The methods of research used in this work include cognition, retrospective and documentary analysis, as well as synthesis, generalization, and systematization.

B. Venture capitalists and funds

There are venture capitalists and venture funds between financial and strategic investors. These investors mostly seek to obtain a significant share in the company (usually 20 to 40 % or more). As a rule, a venture investor does not have a business plan but he demands that the company management would draw up such a plan and follow it during the investment cycle. In most cases, the investment cycle of the venture capitalist ranges from three to ten years [2].

The venture capitalist hopes that the company in which he invests will improve its sales and revenue significantly, and the company's market value will increase dramatically, after which the investor will be able to sell his company stocks [4].

The venture capitalist defines his exit strategy before agreeing to invest. The most typical exit strategies include selling the stocks in the stock exchange, selling the investment to a strategic investor, or selling the share to the other shareholders or company management [6].

Funds began to emerge in the USA, a country with a highly developed infrastructure for venture investing. According to the US model, the funds were formed mainly to finance ambitious ideas and initiatives [7].

Such strategies have been extensively applied for decades in the United States and Western Europe and have become increasingly common in recent years. The global venture capital market totaled over $100 billion in the mid-1990s. New venture capital investments amounted to $10 billion in the United States and about $8 billion in Europe in 1996 alone [3].

In the context of industrial recession, the experience of developed countries which faced the difficulties similar to those of the modern Russian economy shows that venture capital funds can be an effective means of resolving the shortage and the high cost of investment resources [2].

Western Europe adopted the innovation, and today, venture funds invest more than $6 billion in the region's economy per year. However, unlike their US counterparts, European funds prefer to invest not in emerging, but mature and established companies. The reason was that many funds, the English ones namely, lost a fortune in the early 80s through investing in ambitious and rather popular IT innovations [4].

Venture funds of the Netherlands and France seek investment mainly in the largest banks and insurance companies, while the British invest in pension funds, constituting one third of all capital injections. The latter comes from the fact that pension funds investing in business ventures in this country enjoy preferential taxation [6].

The main difference between venture funds and other institutional investors is that the former invest through purchasing stocks [7].

For most of the funds, seven to ten years are enough to convert all acquired securities and close down. Therefore, venture funds are keenly interested in the high prices of the acquiring company's stocks. To achieve this, funds take an active part in the company management and give advice to their top managers. A representative of the fund is often a member of the Board of Directors [10].

In the second half of the 20th century, venture capital played an important role in the implementation of major

scientific and technological innovations in microelectronics, computer science, biotechnology, and other high-tech fields. Thus, the formation of business ventures is actively promoted by public authorities in many major industrial countries. They appear along with the need to increase the competitiveness of the domestic industry in the light of the competitive challenges in the global market [2]. Maintaining the rates of employment and creating jobs in small businesses are crucial [11].

The result of targeted government intervention in this area can be illustrated by the example of Western Europe. This area lagged behind the United States in the total amount of the venture capital raised from different sources and functioning for the sake of economy until the early 1980s. In 1991, they managed to catch up and outpace the Americans [12-15].

Raising funds for venture investment from Russian sources is extremely difficult, even in theory. One can see the very weak spots of this economic sector, unfavorable regulations, and lack of commercial interest because of high risk [6]. The investment policy of Russian banks was mostly determined by high inflation, monetary instability, and cost-effectiveness of government securities. It is now clear how devastating the results of such a short-sighted banking strategy can be [7].

Nowadays, banks do not seem to be ready for long-term investments. Russian entrepreneurs are forced to accept the expensive, short-term, low-risk loans offered by Russian banks, and banks are not encouraged to invest in venture funds [16].

Under the Russian law, pension funds can invest money in some limited financial facilities: [2] government securities; bank deposits and real estate; and stocks of listed companies.

Today the term "venture capital" is not included in the Russian official glossary of terms [4].

C. Problems of business ventures and ways to solve them

Venture funds operating in Russia, as a rule, are financed by large international financial institutions, including the European Bank for Reconstruction and Development. That imposes auxiliary restrictions on their activity and interferes with the choice of funded areas. In contrast to the Bank, the Fund claims part of the company property. That is why the company's legal status is of great interest to the investor [3].

The investor is willing to take risks; therefore, funds need more time for decision-making: four to six months at least [4].

Reliability in return for a guarantee of confidentiality is the basic policy for submission of information. One can alienate the investor or significantly complicate the further development of relations underestimating or overestimating the key figures and distorting the actual situation in the company [10].

The projects considered by venture capital enterprises tend to be high-risk ones with an average payback period of seven to eight years. The company forms a special venture fund to finance these units, and its managers are authorized to plan the frequency of use of the fund and determine the amount to be allocated [17].

In Russia, the European Bank for Reconstruction and Development and other international financial institutions have taken the first steps to apply the fundamentals of business ventures. The aim is to overcome the crisis and improve the efficiency of privatized enterprises rather than for financing entrepreneurial initiatives. However, it is still one of the common trends for business ventures [4].

In 1997, a venture fund was reported to be founded using the funds of large Russian banks [2].

In December 1997, in Russia, the first venture fund with state participation was founded to support scientific and technical projects and attract private capital to develop high technology secured by state guarantee. While the function and participation of the state in such a project are criticized and considered controversial, it is more important that progress towards other industrialized countries is being made [3].

Now, the future of the project depends on the first results of the Russian high-risk investment campaigns. It is also important how this will be accepted and supported by state bodies because, in order to form effective business ventures, special economic conditions, namely, the positive fiscal climate, are necessary [10].

Business venture partners who joined the Russian Venture Capital Association in March 1997 are well aware of that. Its main task is to lobby the interests of venture capital in the State Duma and the Russian Government and draft a law on venture investment [18].

How economy benefits from business ventures is clear from the fact that in the USA, from 1990 to 1995, private investors had invested about $130 billion in the development of new promising firms which had been the first to operate in the stock exchange. Such funds are invested based on an increase in the exchange rate over a long period. Thus, money will be active and will not put pressure on the budget through the government bond market but will contribute to production development [4].

Investment liquidity in Russia is a problem for venture capital. The liquidity of venture capital investments is even more uncertain for the following reasons: lack of an IPO market; the global market's distrust of Russian companies; large Russian companies' inexperience in the acquisition of companies [19].

This is especially obvious in the transactions where equity investments are often replaced by unsecured loans, or in case of deviation from the conventional purchase of a non-controlling interest within the purchase of a controlling interest by the future strategic partner, who is normally interested in the full control of the company [20].

Another approach, which is caused by uncertainty about the liquidity of the Russian investments, is that investment is made jointly with a prospective strategic partner right from the beginning, or investment is made in a technology based on a recommendation provided by the partners who could become strategic partners if the technology succeeds [17].

The main problem of business ventures is the high risk associated with venture capital projects. Before project implementation, expected innovation-related loss needs to be assessed [21].

The financial costs of technical interventions, the time gap between innovation and productivity, and the likelihood of an innovation-related loss require an assessment of the innovation-related risk. At the same time, a clear distinction should be made between the

expected losses, which is often disregarded by economists [4].

IV. RESULTANALYSIS

While the innovation-related loss is taken into account in advance, the risk-related loss has a certain degree of probability associated with uncertainty factors. Therefore, it is necessary to take into account not only pre-determined but also fugitive losses when assessing economic risk: [2]

$U_k = \frac{U}{Q-L}$,

Where (U_k)is the innovation risk factor;
U- expected loss;
Q- useful effect; and
L- foreseen loss.

Consequently, the economic risk factor determines the magnitude of expected loss within the anticipated innovation-related income and thus warns about the risk related with planned investment when such risk increases.

The proposed mechanism for calculating the risk factor is used in the calculation of possible innovation-related loss arising out of both the entire system of factors taken into account and its separate components [3].

Therefore, it is possible to assess the impact on forming the risk eliminated by each factor, which, in turn, provides the conditions for determining the exceptions to innovative programs of economically risky events. For example, a detached representation of the loss related with external (U_a) and internal (U_b) risks is calculated using the following formula: [21]

$U_k = \frac{Ua+Ub}{Q-L}$.

To accurately assess the need for innovation processes, it is necessary to improve the classification of innovation-related risk factors taking into account the peculiarities of the economic sphere. The more the number of specific factors included in risk assessment is, the more independent the decision about investing in innovations must be [3].

Fig. 1 shows the types of factors influencing the formation of innovation-related risk [2].

The types presented are not stable and, based on individual innovation processes, should include other specific factors, namely the analysis of innovation-related loss [4].

External factors have the greatest impact on the formation of innovations. The main partners of enterprises include the state, which has its specific tax system, suppliers, contractors, lenders, and banks. The source for the external market is the sales market with a certain balance between supply and demand. In any economy, such factors are contributing elements of any innovation-related risk [17].

Assessing the risk, the Bank takes into account the probability of changes in interest rates and long-term loans. In the context of recession, most loans are granted by means of foreign currency and do not contribute to the national income [2].

Consequently, both the volume of bank assets and lending terms for companies fluctuate depending on the inflow of national currency. Unstable interest rates and lending terms in turn increase the banking risk of innovation processes.

Fiscal volatility is another essential factor of investment risk as the tax incentives provided to enterprises at the initial stage of their innovation campaigns can be further changed or eliminated. That can ruin their ambitious innovation plans [3].

The tools used by the state to protect the domestic market are inefficient as well. Foreign goods are imported without any serious economic impediments, which dramatically reduces the local entrepreneurs' interest in large-scale investment. In a highly competitive environment, local investment tends to be too risky [4].

A limited market space for domestic entrepreneurs along with the sudden "intervention" of imported products, which has been recurring over the last years, lead to imbalance between supply and demand in the domestic market, which makes it unclear whether innovation processes are reasonable due to the difficulties occurring during the achievement of end results. As a result, the risk related to the decreasing demand and interest in the end results plays a major role in the assessment of economic necessity for large-scale investment in the country [22].

Along with the external factors of innovation-related risk, special internal conditions also have significant impact hindering innovative activities and increasing innovation-related risk on the enterprise level.

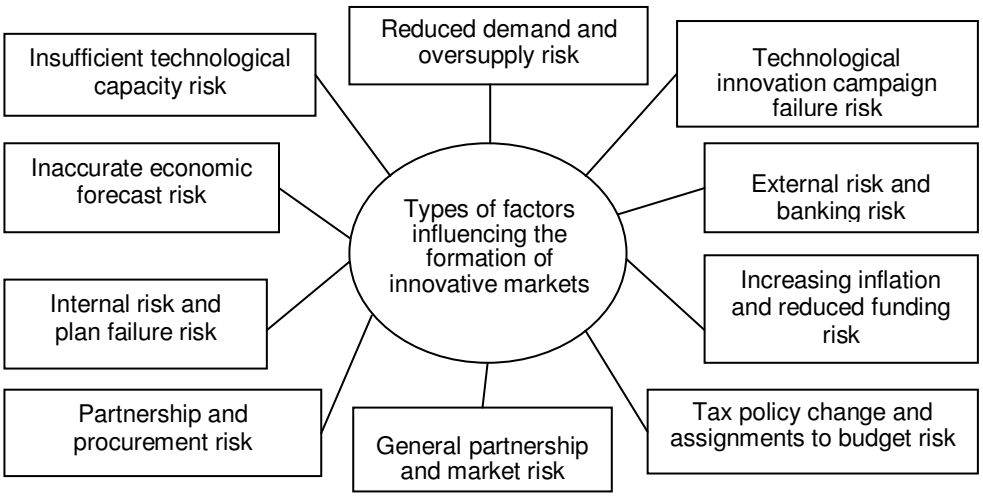

Fig. 1. Types of factors influencing the formation of innovation-related risk.

Nevertheless, it is very clear how incompetent enterprises are in training their managers and executives dealing with innovation [23, 24].

Slow replenishment of the executive staff with the employees focused on the market economy, delayed reconstruction of economic units accompanied by reduction of the research and production staff can lead to a lack of personnel capacity to manage innovation processes in the company [9]. Besides, the lack of human resources is often accompanied by the lack of self-financing.

The internal risk of innovative program shortfall is mainly associated with a decrease in funding investment operations from the company's sources. Deepening financial instability of the company is accompanied by constant troubles with logistics, unduly payments from customers, and downtime due to the energy crisis. This is believed to be the reason for the decreasing funds allocated for innovation [25].

The loss related to inaccurate ROI forecast should be taken into account when assessing the feasibility of innovative programs. It is impossible to calculate accurately the expected positive and negative results of the planned investment in business calculations. Thus, it is necessary to calculate the error-related risk factor and apply it to the innovation performance analysis [21]. It should be noted that this factor increases with the increase in innovative programs.

Unbiased assessment of risk-related loss is now a necessary step to be taken when choosing the extent and ways to implement investment programs [26].

V. CONCLUSION

Business ventures play the role of interim organizational structures created to solve specific problems. Such companies are classified as highly active, which is reflected in the direct personal interest of the company's employees and business partners in the successful commercial implementation of ideas, technologies, and inventions at the lowest cost possible.

The advantages of business ventures include their flexibility, mobility, susceptibility to swiftly reorient and modify their search settings, quickly analyze and try out new ideas, profitability, competition, a clearly defined task, and tough deadlines implying effective actions, including quick intensive research processes.

There are venture capitalists and venture funds between financial and strategic investors. These investors, as a rule, seek to obtain a substantial share in the company.

The venture funds operating in Russia are usually financed from large international financial institutions that impose restrictions on their activity and interfere with the choice of funded areas.

The main problem of business ventures is the high risk associated with venture capital projects. Before project implementation, the loss estimate is necessary.

The venture business is developing rapidly both in Russia and abroad; therefore, the development of an effective strategy is vital for the existence of a company. The experience of leading companies proves that the stability of business development and an increase in its efficiency are impossible without the active use of the chosen development strategy as the main part of a company's management system.

The chosen strategy of a company should be adjusted according to the requirements of innovative processes and changes in the external environment. In terms of sensitivity and flexibility in relation to the dynamics of external conditions, a venture company has priority positions in comparison with industrial enterprises. It is the development of an effective strategy for a venture company that further research will be directed at.

Conflict of Interest. The authors have no conflict of interest to declare.

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