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TECHNOPARK AS A TOOL FOR REDUCING UNCERTAINTY

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Abstract

A consequence of the constantly changing external environment is a high level of uncertainty in decision-making and strategic planning. In such conditions, business entities are forced to look for tools to reduce the level of uncertainty. One of these tools is a technopark. By providing its residents with access to production and office premises, equipment, including high-tech equipment, the technopark lowers the investment threshold for organizing innovative industries. In addition, residents have the opportunity to enjoy tax incentives. Services of the management company (assistance in attracting financial resources, assistance in organizing sales and development of new markets through regional and international exhibitions, training and exchange of experience with technopark residents, dissemination of best industry practices, etc.) reduces the level of uncertainty in decision-making and strategic planning. Assessing the efficiency of the industrial technopark "Irtysh", located in the Omsk region, for a specific enterprise Electrotech Ltd, it should be noted that it is economically feasible for the enterprise to become a resident.

Keywords: Industrial technopark, resident, uncertainty, economic effect, decision making

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1. Introduction

In modern conditions, the factor of uncertainty in decision-making by managers and owners of enterprises plays a decisive role. This is due to the high rate of changes in the external environment, the high speed of communication and information dissemination, and the availability of information resources (Pilipenko, 2019).

In such a situation, the management faces the task of making optimal decisions and reducing the level of uncertainty. Some companies choose situational management - they do not make long-term plans, they make decisions based on the current situation. Others, on the contrary, try to foresee all possible factors, use risk management tools, etc. (Altukhova, 2018).

Both approaches have advantages and disadvantages. In the first case, you can win tactically, but lose in the long run. When using the second method, the speed of decision-making is significantly reduced, which negatively affects the current results.

Industrial and economic policy in the Russian Federation provides for the creation of institutions aimed at reducing the uncertainty of economic entities. Industrial production technoparks are these institutions. By becoming a resident, companies get the opportunity to use the collective infrastructure, services of the management company and enter into cooperative relations with other residents (Vasilyeva, 2019).

2. Problem Statement

In the process of forming its strategy, the enterprise is faced with various factors of uncertainty. These are price changes, adjustments to regulations, actions of competitors, etc. If you do not take them into account, the strategic plan will be unrealizable, or it will have to be adjusted.

Uncertainty is understood as a situation, the outcome of which depends on several factors, the probability of which may fluctuate (Akubardia, 2019). In such a situation, not only the planning process, but also the decision-making process, becomes more complicated for an entrepreneur or enterprise. Accordingly, any economic entity seeks to reduce the level of uncertainty. For enterprises, one of the tools for solving this problem is a technopark.

By becoming a resident of the technopark, the enterprise gets the opportunity to use the infrastructure, apply innovative technologies, and cooperate with other members of the technopark. At the same time, certain obligations are imposed on the technopark resident: rent payments for the use of property, creation of additional jobs, and the volume of products manufactured (Likhacheva, 2020). In this regard, questions arise:

- How effective is residency in a technopark?
- Is there a decrease in the level of uncertainty for the enterprise-resident of the technopark?

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3. Research Questions

In the course of the study, it is necessary to assess the effectiveness of the enterprise joining the technopark. This will require determining the benefits that the company receives by becoming a resident of the industrial and production park, as well as the mandatory additional costs that it will have to incur.

To assess the level of uncertainty of a technopark resident enterprise, it is necessary to study the issues of cooperation between residents, the services of a management company and other opportunities that arise for a technopark resident.

4. Purpose of the Study

The purpose of the study is to study the possibilities of the technopark as a tool for reducing uncertainty for its residents. The object of the research is the material and non-material infrastructure of the technopark for its residents. The subject of the research is the system of strategic and business planning of residents. The study was carried out on the example of Omskelectrotech Ltd.

5. Research Methods

The study used theoretical and empirical methods. The first includes the study and analysis of special literature on the research problem, the second - the study of descriptions of business processes of the enterprise, employee survey, statistical methods of processing materials.

The information base of the study was the regulatory legal acts of the Russian Federation, the works of domestic and foreign scientists in the field of strategic management of business processes; data of statistical bodies, materials of periodicals, Internet resources, descriptions of business processes of Omskelektrotech Ltd, financial and accounting information of Omskelectrotech Ltd.

6. Findings

In accordance with the goals and objectives set, it is necessary to consider the tools with which the technopark can reduce the level of uncertainty for business entities (utilities infrastructure and services of the management company), as well as evaluate the effectiveness of joining the technopark using the example of a specific enterprise Omskelectrotech Ltd.

6.1. Technopark infrastructure elements

Industrial technoparks are objects of industrial infrastructure and technological infrastructure intended for the implementation by subjects of activity in the field of industrial production, and (or) scientific and technical activities, and (or) innovative activities in order to master the production of industrial products and commercialize the obtained scientific and technical results and managed by the management company (Kuleshova, 2019).

In the northern industrial zone of the city of Omsk, within the boundaries of the special economic zone "Avangard", the first industrial technopark in the region is being created.

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The project is planned to be implemented in several stages on 7 land plots with a total area of 17 hectares. A significant part of these plots is occupied by industrial capital construction projects to accommodate potential residents ("Brownfield"); the rest is free for new construction ("Greenfield"). This provides the project with development potential and the opportunity to work with future residents who have a wide range of needs and carry out various types of economic activities.

The main task of the project is to create an effective, operating system of support and promotion of innovative projects from the moment the idea was born to the organization of production and product release. (Zhigalov, 2019) Currently, a number of infrastructure facilities are located on the territory of the technopark. Their list is presented in Tables 1, 2 and 3.

Table 1. Property complex

Premises	Square, m^2
Office rooms	980,00
Industrial premises	6 337,60
Warehouses	5 100,00
Auxiliary and other	2 360,00

Table 2. Transport infrastructure

Infrastructure object	Length, m	Square, m^2
Parking	-	100,00
Internal roads	100	-
Access railway track	607	-
Non-public railway track	297	-
Railroad unloading ramp	-	-
Pit for unloading railway wagons	-	-

Table 3. Utilities infrastructure

Infrastructure object	Units rev.	Total	Free
Power supply	MW	5,0	2,5
Central heating	Gcal/hour	13,5	4,6
Central water supply	m^3/hour	1,6	0,5
Wastewater disposal	m^3/hour	1,1	0,5
Gas supply	technical conditions available (construction is planned at the expense of a subsidy)		
Internet, speed	Mbps	100,0	
Telephone	numbers	100,0	85,0

The analysis of the presented data shows that the technopark has a sufficient amount of free capacities. By renting a room, a resident can be confident in the possibilities of expanding his business, there are no obstacles for this. In addition, when concluding a long-term contract, the risks of doing business are significantly reduced.

It should be noted that infrastructural capabilities have been expanded in the following way:

- the length of internal roads has been increased;
- the area of the parking lot has been increased;
- a gas pipeline has been built;

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- capacity of existing engineering communications (electricity, water supply, sewerage) has been increased;
- construction of new industrial premises of the technopark with an area of ≈ 7000 m^2 has been initiated;
- technopark facilities with office, laboratory, technological and production equipment for collective use for residents have been equipped;
- construction of technological infrastructure facilities: an engineering center, a center for collective use, laboratories, has been started;
- purchase of office furniture, electronic computers to provide the technopark residents has been made (He, 2020).

Thus, additional opportunities are created for the residents of the technopark to optimize costs. There is no need to purchase your own expensive equipment, as well as computer and office equipment. For Omskelektrotech Ltd, the savings from joining the technopark are estimated at up to 7 million roubles.

In addition, the residents of the technopark have tax benefits under the simplified taxation system and property tax. Within 5 years, for Omskelektrotech Ltd, savings due to tax incentives will amount to more than 10 million roubles.

At the same time, not so many requirements are imposed on a resident:

- small or medium-sized fast-growing company;
- registration on the territory of Omsk;
- high-tech modern production;
- increased requirements for the leased production site;
- interest in reducing own capital expenditures;
- need for specialized technological services.

There are no requirements for the minimum investment, creation of additional jobs or the implementation of any mandatory expenses.

6.2. Services of the management company

Property:

- leasing of movable and immovable property of the technopark.

Utility:

- providing the residents of the technopark with the resources of engineering networks;
- maintenance of the property complex of the technopark and its residents (repair of premises, services for the operation of buildings);
- landscaping and cleaning of the territory, ensuring the security of the territory;
- provision of logistics, telecommunication, service (Viktorova, 2019).

Consulting:

- development and support of residents' activities: audit and financial, marketing support, legal and legal consulting;
- assistance in attracting grants, loans, services for registration of applications for subsidies and grants;

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- patent and licensing support;
- organization of interaction with service infrastructure companies, investment companies, representatives of regional and federal executive authorities, local government bodies and development institutions (Khakhanov, 2019).

Production development:

- assistance in the creation of industries with new technologies, the development of high-tech industries;
- assistance in the implementation of foreign economic activity in order to promote the products of residents to the foreign market, as well as assistance in the demonstration of products of residents at Russian and international exhibitions (Valinurova, 2017).

Organizational:

- formation of an environment for information exchange between residents of the technopark, organization of educational programs, trainings, seminars;
- services: negotiation service (including translations, coffee breaks); supply of general use goods - office supplies, food, household goods; maintenance of vending machines, office premises, household and hotel services, easy access to banking and postal services (Naumov, 2017).

Despite the fact that the services of the management company are paid, their cost will be significantly lower, since the costs are distributed to all residents on the basis of outsourcing. At the same time, the effect of attracting financial resources, assistance in participation in regional and international exhibitions, training, exchange of experience and the formation of cooperation ties between cluster residents significantly exceeds the cost of these services of the management company (Samsonov, 2017). At present, it is difficult to estimate the costs of Omskelectrotech Ltd, since the cost of a number of services will depend on the size of the effect obtained. The business plan includes the costs of paying for the services of the management company (including rental of equipment and premises) from Omskelektrotech Ltd in the amount of 6 million rubles per year.

7. Conclusion

Based on the above, it can be concluded that it is advisable to enter Omskelectrotech Ltd into the Irtysh industrial technopark. This is not only cost effective, but also reduces the level of uncertainty in the strategic perspective.

7.1. Technopark infrastructure elements

The infrastructure of the technopark is redundant, so there are opportunities for Omskelectrotech Ltd to increase production volumes. This enterprise fully complies with the requirements for a potential resident of the technopark; therefore, it may well qualify for concluding an agreement on entering the technopark.

In addition to the possibility of increasing production, the enterprise has the opportunity to access technological equipment for testing products, interacting with specialized educational institutions in terms of commercializing new technologies, developing new design and technological solutions. The office

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premises of the technopark are equipped with everything necessary for a comfortable business (Oganesyan, 2020).

7.2. Services of the management company

The planned costs for the services of the management company will amount to about 6 million rubles per year (including the cost of renting office and production space, equipment). Savings due to tax incentives and the use of shared equipment will amount to 10-12 million rubles in year. Thus, the economic effect will be 4-6 million rubles in year. This is quite enough for making a decision on filing an application for joining the technopark.

We noted the intangible effect of the services of the management company in terms of assistance in attracting financial resources, assistance in expanding sales markets through assistance in participating in international and regional exhibitions, organizing exchange of experience with other residents of the technopark. This also includes introducing best business practices in the framework of consulting services of the management company and various trainings (Safronova et al., 2018). Thus, a technopark resident gains access not only to equipment and infrastructure, but also to new knowledge and professional information, which significantly reduces the uncertainty in decision-making and development of strategic plans.

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