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DEVELOPMENT OF INNOVATIVE ACTIVITY IN SMALL AND MEDIUM ENTERPRISES IN KAZAKHSTAN

Abstract. The formation of an innovative economy in Kazakhstan is a complexity of economic, social and political issues. An effective use of scientific research findings and developments in the real economy is the most important in terms of Kazakhstan's successful competitiveness, maintenance of high economic growth, improvement of quality of life and implementation of other innovative priorities. In these regard, innovation management and development is becoming more topical as the basis for developing Kazakh companies, by set of relevant technical, operational, organizational, marketing and financial operations.

The aim of this study is to identify characteristics and practical recommendations for the development and further improvement of management mechanisms related to the innovative activities of enterprises in Kazakhstan.

Keywords: innovation, innovation process, innovative activity, small and medium enterprises, the Republic of Kazakhstan.

1. Introduction

In Kazakhstan, innovation activity of all enterprises in the real sector of economy remains very low; innovative entrepreneurship does not define overall situation in SME business: in 2015, contribution to the economy by innovative SME made up to 1.4% [1].

A shift from export oriented economic model to innovative economics in Kazakhstan is necessary. Today, the State is significantly lagging behind than other developed countries according to innovation driven indices. The Republic of Kazakhstan can be competitive by shifting to a new model of economic growth. The State needs effective strategy for growth through innovation by implementing the development of commercial innovation activities.

From the moment of following industrial innovative development in 2003, Kazakhstan had reached a peak of the main innovation activity indicators in 2014. Positive growth was caused mainly by successful implementation of "The state program for accelerated industrial innovative development of the Republic of Kazakhstan" in 2014.

2. Methods

This research has been made to measure the variation of the economic development and innovation in Kazakhstan in terms of increasing global competition.

3. Results

3.1 Innovative activity in Kazakhstan

In 2015, in relation to 2005, shares of innovation active enterprises had increased from 3,4% to 8,1% (Figure 1).

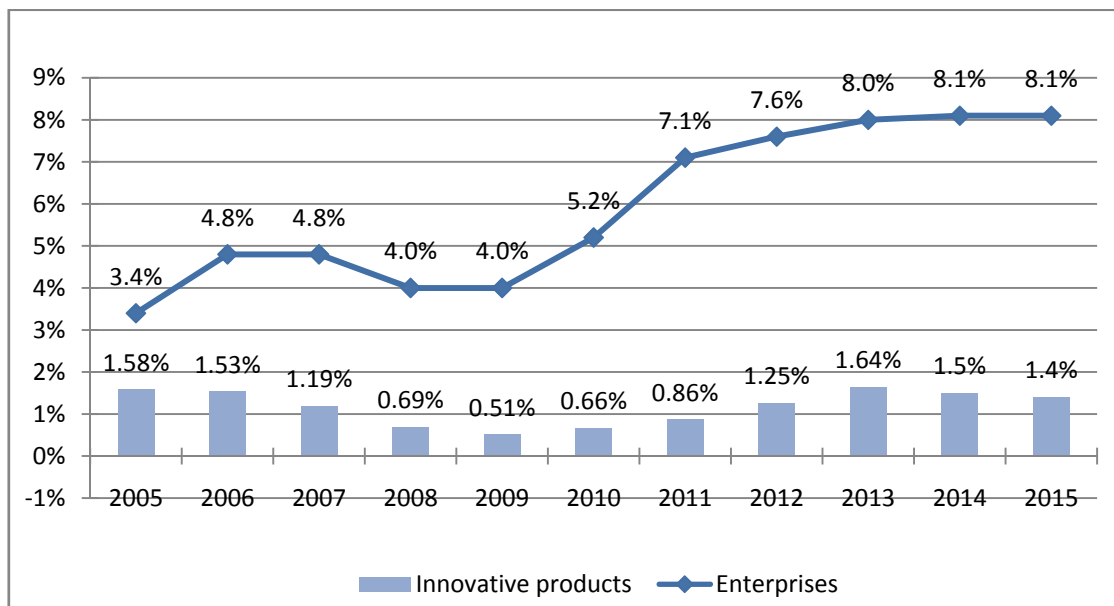


Figure 1 – Innovation activity of Kazakhstan enterprises (share of innovative products in GDP and share of innovation led enterprises among all enterprises)

Source: Committee on Statistics of MNE RK, <http://stat.gov.kz>

To draw comparison: in USA shares of innovation active enterprises make up to 50%; among the European Union countries Germany (79.3%), Sweden (60%), Finland (58%) have highest share. Medium share of innovation active enterprises in the European Union compiles around 53%. (Figure 2) [2].

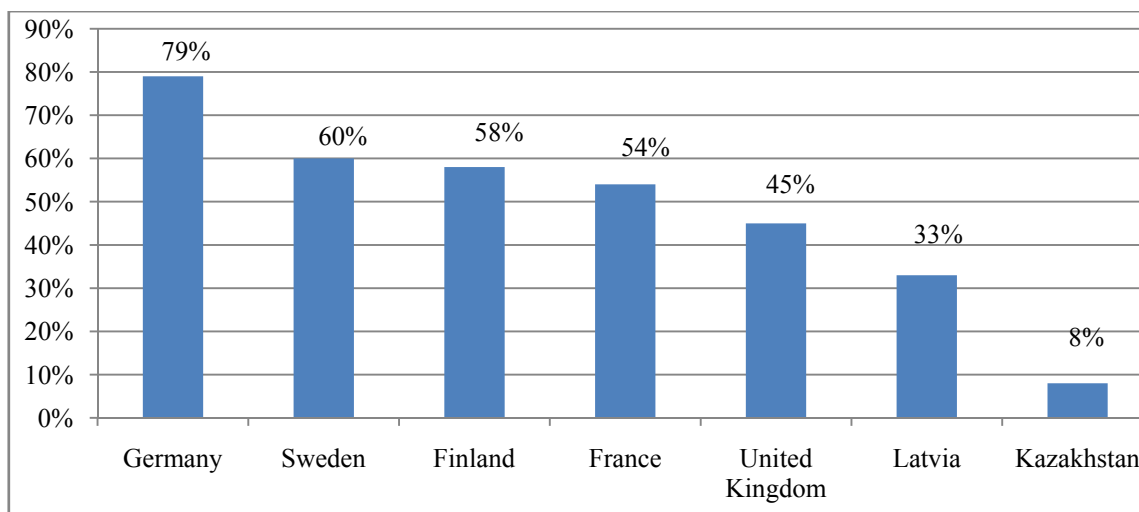


Figure 2 – Innovation activity of Kazakhstan partnerships and foreign countries

Source: National agency on technological development, <http://natd.gov.kz>

Research and development expenses are one of the main indicators of innovation activities. Leaders of this indicator are USA (415 billion USD), China (208,2 billion USD), Japan (146,5 billion USD), Germany (93,1 billion dollars) (Figure 3).

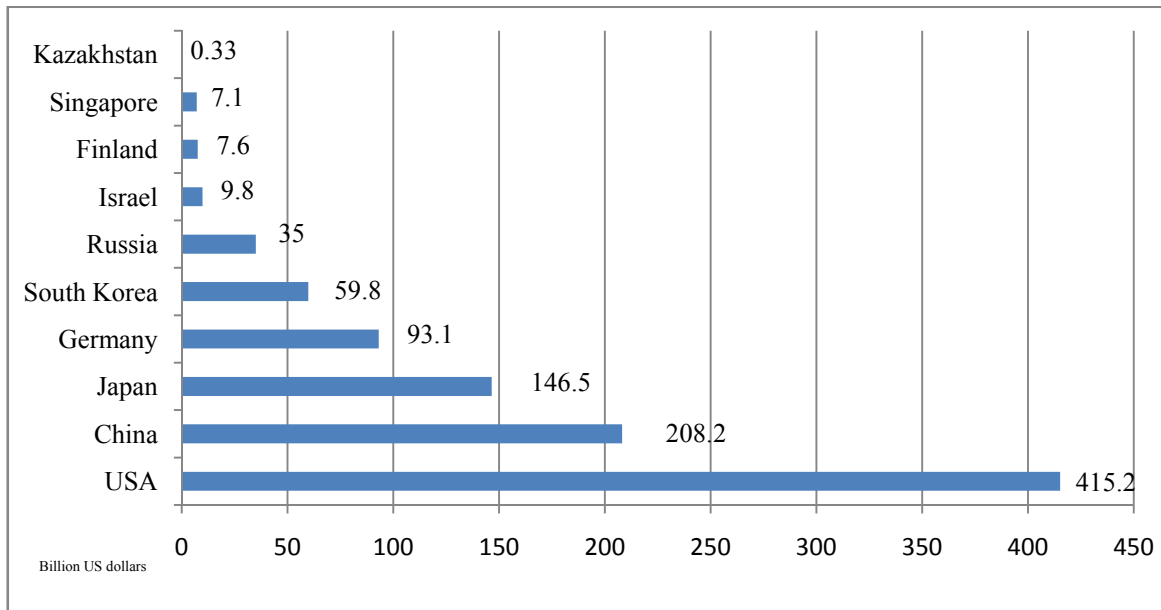


Figure 3 – Research and development expenses in billion USD
Source: National agency on technological development, <http://natd.gov.kz>

It is necessary to mention the rapid growth of research and development expenses in China. Compared to 2008, this indicator has increased by 1,7 times. Kazakhstan is lagging behind technologically developed countries on the scale of research and development expenses. However, compared to 2011, growth of expenses on research and development in 2013 (61.7 billion KZT) was 42,5% [2].

The largest share of research and development expenses in GDP has been to Israel (4,38 % of GDP), South Korea (4,03 %), Finland (3,78 %), Japan (3,39 %).

It is necessary to mention, that according to European Strategy 2020, one of the five general target indicators is increasing expenses on research and development in the European Union (EU), up to 3% of GDP. In 2011 the average indicator in the EU was 1,94 %, which is higher than China (1,84 %). Among the other European countries, Finland has one of the highest indicators (3,78 %). Indicator of research and development expenses of GDP in Kazakhstan is still low – 0,17 %. However, it is necessary to mention that local science system is in the beginning of its development [2].

According to number of researches, performed by R&D, Kazakhstan is lagging behind many foreign countries (Figure 4).

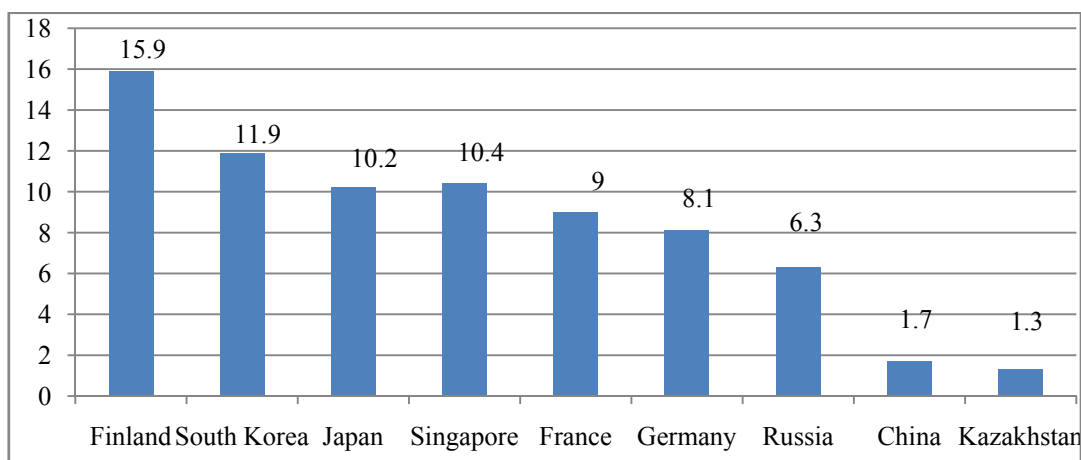


Figure 4 – Number of total researchers.
Source: National agency on technological development, <http://natd.gov.kz>

Analyzing the number of total researches, we see that Finland exceeds Kazakhstan by 12,2 times,

South Korea by 9 times, Singapore by 8 times.

Nevertheless, according to local statistics data of 2013 this index has increased by 59.5% (up until 17,195 people) compared with 2008.

Therefore, innovation development in Kazakhstan is restrained by personnel deficiency, capable to manage innovation processes and projects. Despite positive statistics in the scientific sector, the staff in Kazakhstan requires effective state support and additional stimulation.

3.2 Managing innovation in Kazakh small and medium enterprises

In western European countries, 80% of expenditure is allocated for innovation, with more spent on research and development. Differences in approaches undertaken in Kazakhstan and other countries are given in Table 1. The Table shows the predominance of the state strategic planning and forecasting in Kazakhstan, compared to the more pragmatic foreign models.

| Foreign countries | Kazakhstan |
|---|---|
| The predominance of some conceptual approaches in the general strategy of development for 2001-2010 | |
| Main models implemented in foreign countries: development of human capital assets; innovative ventures; the introduction of corporate management; industrial development. | State strategic planning and forecasting; Kazakhstan-2030; FIID; “disruptive projects”; 40 corporate leaders, etc. |
| Crisis bailout plan for 2008-2011 | |
| Financial stability, control of inflation. | The implementation of the SP FIID; “Business Road Map-2020”; economic growth stimulation; micromanagement in the real sector. |
| Long-term strategy for the XXI century | |
| Reindustrialization, the preparation for industrial revolution, etc. | SSP Kazakhstan-2020; Social modernization; Concept of Universal Labor Society, Kazakhstan 2050: Development strategy, etc. |

Source: compiled by authors

It is seen from the comparison of approaches that the state, with its inherent functions, is an active subject of the modern market economy: economic, social, administrative, and other similar mechanisms.

1. State-owner: generates the sector of public enterprises and national companies, main duty is the management.
2. State-enterprise: participates in national and other high-risk projects, using existing assets, including public and private partnerships, and manages own or joint businesses;
3. State administrator: coordinates and controls the activities of all economic players, including own business, and public sector of the national economy;
4. State corporation: creates conditions for acceptable activities for all economic players, directing them to form the Universal Lobar Society or a welfare group.

Subsequently, the Kazakhstan practice had confirmed the complexity of innovation development and identified inefficiencies in transitioning to an innovative economy. Accordingly, during 2009 – 2010 the Government adopted swift action to change this situation in terms of the most critical areas and points of application. A more thorough analysis of the causes and effects impeding economic development was conducted. The failure in the industrial sector was considered to be the main deterrent in transitioning to an innovative economic model. The reason for adopting a new state program of innovative development was based on rapid industrialization, which was originally based on implementing more effective ways for the state to regulate innovative processes.

To draw comparison: in USA shares of innovation active enterprises make up to 50%; among the European Union countries highest shares have Germany (79.3%), Sweden (60%), Finland (58%) [3].

Based on the analysis of institutional changes in Kazakhstan, we have identified the main reasons for the reduced effectiveness of the innovation processes in Kazakhstan, and these are schematically shown in Table 2.

Table 2 - Reasons for reducing the effectiveness of innovation processes in Kazakhstan

| Economic | Organizational | Legal | Infrastructural |
|--|--|--|--|
| <ul style="list-style-type: none"> - low scientific technical and innovative potential; - lack of assets; - adverse terms of crediting; - high innovation cost; - low effective demand for innovation; - high economic risk for innovation; and - long-term payoff. | <ul style="list-style-type: none"> - lack of interaction between science and production, between state and private sectors; - lack of new forms of development, cooperation, production of complex products; - low level of regional and world integration. | <ul style="list-style-type: none"> - incomplete legislative and normative basis for innovative activity, stimulation and regulation; - defense of rights for intellectual property; - patent legislation. | <ul style="list-style-type: none"> - underdeveloped technology market; - underdeveloped information and communication market; - underdeveloped innovative infrastructure. |

Source: compiled by authors

3.3 Innovative enterprise financing

Economic diversification is a well-established activity of Kazakhstan. This is reflected in the task, set by the State Program of Forced Industrial and Innovative Development. This program provides the sustainable development of innovation. However, the next decade is expected to see a doubling of oil production, creating a challenging political task to reduce the country's dependence on primary commodities [4].

In the first stage, which started in 2010 after a preparatory phase, the state program focused on modernizing production facilities. The second stage of a new economic creation was aimed at developing new enterprises in Kazakhstan, involving companies that were world leaders in different sectors. The third stage involved the creation of a framework for the future economy through investments in aerospace, biotechnology, information technology, and alternative energy production (Table 3).

| | |
|-------------------------------|--|
| Preparatory stage (2011-2012) | Third stage: base formation for “future economy” (2012-2014) Aerospace, biotechnology, information technology, and alternative energy production. |
| Preparatory stage (2010-2011) | Second stage: new economy creation (high labor efficiency) (2011-2014) The creation of new enterprises with the world's leading companies in certain sectors. Development of measures to stimulate the economy (SME development, reducing the share of oil and gas exports through the export of other commodities, and foreign investment). |
| Preparatory stage (2009) | First stage: economy based modernization (material refining efficiency) (2010-2014) The establishment and operation of scheduled national and regional investment projects. Development of industrial and regional development programs. Development of laws on industrial policy, SME. |

Sources: compiled by authors

Currently, the complex instruments under the state influence aim to achieve the economic level of developed countries that are close to the technological frontier. Strategies must differ from the measures already implemented, to ensure similar effectiveness of more developed countries. This applies to the various tasks assigned to each of the three stages of the development strategy of Kazakhstan. The modernization of existing structures is mainly carried out at the expense of investments. It needs imports and effective use of industrial technologies, including the improvement of the workshop management, organizational innovation, and staff development [5].

Initially, booster strategies and measures for developing innovative potential of the economy should dominate in the context of Kazakhstan, which can draw on the second stage of SPFIID, and grow over time. The emphasis here is on creating an enabling environment for innovation that contributes to sustainable and gradual progress on several issues.

3.4 State financial institutions

The political stage of SPFIID provides guidelines and a legal framework to develop financial support for innovation within the country. This is a part of the Kazakhstan Strategic Development Plan until 2020.

There a number of institutions that are involved in financing and modernizing management operate in Kazakhstan. These include institutions that fund investments, attract infrastructure projects, and provide resources for innovation. The most important institutions in this area are discussed below.

Development Bank of Kazakhstan (DBK) was founded in 2001. It provides financial support to the private sector and government agencies by providing medium- and long-term loans at low interest rates. The Bank focuses on infrastructure projects and crediting industrial enterprises. It is owned by Samruk-Kazyna.

The purpose of the DBK is to promote sustainable economic growth by providing long-term funding and various financial services in non-extractive industries. Since its formation in 2001, the Bank has considered a total of 180 projects, total 10.4 billion dollars, 5.1 billion dollars of which were provided by the DBK.

From 2007 to 2011, the Bank's portfolio grew more than three times. The Bank's assets amounted to more than 6 billion dollars, about 2 billion dollars of which were singled out as loans. The subsidiary organization, DBK-Leasing, established in 2005, provides short-term and long-term lease financing and participates in the program "2020 Productivity". Their existing loan portfolio shows significant lending to primary industries, based on raw materials, such as oil refining, energy, metals, and non-metals production, which accounted for nearly two-thirds of the total loan portfolio at the end of the first half of 2011. Lending for transport and logistics also comprises a large amount and represents about 10% of the Bank's total portfolio.

The DBK plans to become a major source of long-term finance for infrastructure development, strategic investment projects, and export operations. It plays an important role in the implementation of SPFIID. With this state program, the Bank plans to increase the share of lending to the following industries: metal, transport, energy (electricity), chemical and petrochemical, telecommunications, and others.

Damu Entrepreneurship Development Fund was created in 1997 to provide financial and non-financial support to small and medium enterprises, and to stimulate demand for products and services of these companies. Damu is working at the regional and national levels. With 16 offices across the country, this subsidiary of Samruk-Kazyna tends to be a unifying channel of governmental measures that support entrepreneurship development and small and medium businesses with 13 financial and 11 non-financial programs. The fund also assists the business environment in general. Damu is currently a financial party of the "Business Road Map 2020", one of the SPFIID activity directions.

The purpose of *Investment Fund of Kazakhstan (IFK)*, established in 2003) is to ensure that the industrial and innovation policy in Kazakhstan are included in implementation, and investment projects and financial support is provided for private sector initiatives in non-oil sectors of the economy. The achievement of these goals is provided through direct equity participation in the invested companies.

The IFC invests in new and existing companies that are engaged in raw material processing and which use new technologies in the development of competitive products. As well, it provides services to other companies. The IFC is also co-financed and involved in the management of investment projects in the non-oil sectors of the economy. The fund participates in co-financing overseas investment projects that deal with initiating industrial cooperation between national and foreign companies.

Its current portfolio includes 28 investment projects amounting to 670 million dollars. The direct participation of IFC makes up 198 million dollars.

Over the past 10 years, Kazakhstan has adopted a number of measures to create an institutional infrastructure that supports innovation. One involved the creation of *National Agency for Technological Development (NATD)* in 2003, under the Ministry of Industry and New Technologies. The NATD activities include: operation of the Center for Engineering and Technology Transfer (CETT), direct investments in innovative companies, and support to R&D projects. The NATD is actively involved in promoting innovation through investment in equity share capital, redeeming domestic and foreign venture capital funds, supporting technology parks, and stimulating the development of an innovative culture.

Fund of Science was established in 2006. The fund is actively operating in the field of information and communication technology (ICT) and space technology, nanotechnology and new materials, biotechnology, renewable energy technology, and nuclear technology. The fund provides loans to scientists who plan to set up a company or sell their findings in the next 3-5 years. The funding ranges from about 50 thousand to 2 million dollars. Eleven projects are supported so far, and in mid-2011, three of them started redeeming the funds provided (Table 4).

All institutions are currently considering new opportunities to replenish their portfolio of tools. Damu, for example, is working on a guarantee mechanism to assist small and medium enterprises (SMEs) in obtaining financial support from the banking system and have plans to invest in equity share capital. NATD continues its activity on the development of business incubation in technology parks [2].

Table 4 – Review of main institutions and their financial instruments

| Financial institutions | Participation in financing | Loans | Grants |
|---|---|--|--|
| Development Bank of Kazakhstan | | Infrastructure development, pilot projects, industrial companies | |
| Entrepreneurship Development Fund (Damu) | | Various programs, micro-finance, “Business Road Map 2020”, “2020 Productivity”, etc. | |
| Investment Fund of Kazakhstan | Various development projects | | |
| National Agency for Technological Development | Investment projects to innovation companies, national and foreign venture funds | | R&D grants for various aims: patenting, technology acquisition, project feasibility study, and R&D |
| Fund of Science | | Commercialization | R&D grants |

Sources: compiled by authors

Sectoral programs have been adopted for more effective actions, in all the 13 priority sectors: mining and metals, machinery, chemical, pharmaceutical, textile and construction, production of construction materials, oil and gas, transport infrastructure, agriculture, space activities, information and communication technologies, and tourism. This involves more than 100 new business support tools. Laws pertaining to the state support of industrial innovation, energy conservation and efficiency have been adopted. In addition, laws for creating special economic zones and reducing administrative barriers for business have been developed and adopted.

Along with the sectoral programs, there are special programs that support the project. These include 1) the forced modernization of the existing and creation of new productions through “2020 Productivity”; 2) a design-targeted, export development and promotion program with “2020 Export”; 3) support and encouragement for foreign direct investment with “Investor – 2020”; and 4) the development of entrepreneurship in the regions with “Business Road Map 2020.” Today, forced industrialization is an objective necessity for Kazakhstan. Through rational territorial organization of economic potential, the “Industrialization Map for 2010-2014” will allow the creation of new economic growth centers in the country and a balanced development of priority sectors [6].

3.5 The development of innovation support system of the enterprise

To ensure further innovative development of enterprises, the following is recommended.

The development of an effective system for technology commercialization. Commercialization of technologies should be linked directly to the practical application of scientific and technological activities, in order to introduce into the market either new or improved products, processes and services that have a positive economic effect.

A systematic approach to commercializing technology will give a significant impetus for a rapid introduction of scientific and technical activities in the economic cycle. This will eventually allow the state to create new jobs, to return to the budget through tax revenue, invest in research and development work and improve the overall competitiveness of Kazakhstan in the global technology market.

To create a normative legal base for the development of a system for intellectual property and commercialization in the Republic of Kazakhstan, the interests of all stakeholders in intellectual property and commercialization should be taken into account, to ensure investments are stable and secure. This measure will allow research institutions to participate in all forms of intellectual property and commercialization, and likewise for researchers working in public research institutions. As well, it will

allow them to manage and own a share of the stocks in an innovative company. This would reduce the risk of scientific unities creating their own intellectual-property based business.

In particular, according to the experience of European countries, state supports the use of the commercial potential of research institutes and universities, stimulates and motivates scientists and institutions to commercialize their knowledge and technology. The continuous transfer of knowledge from the public sector to the private should be developed. It is necessary to arrange measures to recognize domestic patents abroad, develop a system of intellectual property for implementation into the economic circulation, and develop a state system of intellectual property valuation [7].

It is also necessary to create a system of information exchange – **a state network of institutions for innovative development**, to support innovative projects at all stages. As a part of such system of information exchange, the mechanism of forwarding on information, which promises innovative projects among institutions of innovative development, should be established. An information exchange system should also be an effective tool of “linking” the research and development with the business, resulting in the formation of new companies based on the results of applied research.

Development of national human resources and accumulation of competences in the field of technology commercialization. To build competencies in the field of technology, a development priority would be to provide commercialization training to staff supporting the commercialization process and their primary beneficiaries.

The development of human resources is required for successful commercialization. Training, exchange of experience, and targeted outsourcing of professional advice will play a central role in creating a sustainable system of technology commercialization in Kazakhstan. In this regard, it is necessary to encourage local experts to participate in various programs that improve competence in the field of commercializing innovation and to visit foreign structures of technologies for best practice in commercialization.

The stimulation of enterprise innovation activity. The transition of Kazakhstan’s innovation system from a model driven, by the state to a sustainable system, driven by the private sector is necessary to reduce administrative barriers and tax incentives, provide access to finance, create innovation clusters, develop the business environment, and to create demand for innovation.

The reduction of administrative and technical barriers, together with improved access to finance will contribute to the emergence of a large number of innovative companies.

The openness of the domestic markets will lead to an increased access to global knowledge and technologies. In this case, the transfer of advanced knowledge and technologies could be implemented through the creation of an enabling environment and incentive tools, including the following important directions:

- involvement of foreign innovative companies of small and medium, creation of joint ventures among them;
- maximum use and attraction of scientific potential from fellow scientists who are successfully working in foreign research institutions;
- disclosure of foreign patents and licenses with the transfer of advanced technologies to improve the competence of local specialists [8].

In order to better promote Kazakhstan’s high-technology products in international markets, it is necessary to strengthen regular interaction among stakeholders (e.g. the export-oriented high-technology and innovative enterprises and companies; joint-stock company “National Agency for Technological Development”; JSC with their “Damu Entrepreneurship Development Fund”; and JSC with their “National Agency for Export and Investment”).

The reduction of administrative barriers and tax incentives. Today, Kazakhstan functions under the principle of tax legislation unity, which provides a single regime for all businesses, regardless of the innovative component of their products.

At the same time, innovative companies are in need of an unprecedented legal regime that will minimize administrative barriers.

In order to develop possible administrative and tax incentives for innovation, the following actions are needed:

- to explore the possibility of developing and implementing mechanisms for the promotion of enterprises that work in the legal field; and
- to consider the desirability of introducing a special tax regime to facilitate the conditions for innovative enterprises during the first five years of development [9].

Financial inclusion. Financial inclusion remains a key limiting factor for the development of entrepreneurship in Kazakhstan. This is due to the reluctance of the banking sector to financially risky innovative projects. In particular, these are projects, belonging to small and medium businesses, which, in most cases, can provide only limited resources to secure a loan.

In our opinion, for these purposes, it is necessary to work through the following measures:

- to increase the issuance of microcredits and small grants to promote pilot implementation of capacities and entrepreneurial initiatives;
- to develop financing of equity instruments and tools, aimed at financing the early stages of development of the company; and
- to develop corporate venture capital, by encouraging large companies, including foreign companies, to acquire shares in the new innovative companies [10, 11].

The creation of innovative clusters will increase the innovative activity of business entities, as well as lead to the emergence of synergies. For example, form clusters of participating companies, which are more likely to create new products than single enterprises. In this case, the activity of enterprises within the cluster can overlap and complement each other. The formation of innovation clusters, simultaneously, promotes interchange between related industries and fierce competition within industries.

The formation of the demand for innovation. When building an effective national innovation system, the attention should be focused on implementing measures that increase the demand for innovation. Most countries that are rapidly developing their innovative systems do not succeed, because of the poor demand for innovation.

As shown from international practice, central to the system of national innovation are businesses with their own capacity for carrying out research and development that enables them to innovate successfully [12].

Today, a weak demand is the key constraint to the promotion of innovation within the country. The formation of demand for innovation should be provided by the state through regulatory measures and incentives.

The development of innovative infrastructure. The activity of innovative infrastructure should focus on providing the necessary financial, methodological, and information support at all stages of the innovation process. It should also create and promote new projects that provide advanced scientific development, and introduce high-technology industries. The main elements of the innovative infrastructure are: a special economic zone, “Park of innovative technologies”; regional technological parks; venture capital funds; industrial design offices; and international technology transfer centers [13].

By interacting with each other, these elements of innovative infrastructure will provide an integrated system of support for innovation at all stages of implementation, and this will allow companies to:

- maximize capture of innovative subjects with tools supported by the state;
- establish an effective system of commercialization and promotion of innovation, based on national scientific research;
- establish a system of transfer, localization and distribution of the necessary foreign technologies [14, 15].

4. Conclusion

Integrative processes provide an opportunity for Kazakhstan to expand its markets and increase its capacity for innovation. Competitive pressure creates a huge incentive for Kazakhstan enterprises to innovate. To take full advantage of these opportunities, it is necessary to make effective policy measures to support further modernization and diversification of the economy.

The questions regarding innovative processes, management improvement, and innovative achievements are now becoming more relevant. They require the participation of the various layers of Kazakh society. At the same time, as evidenced by the latest Kazakhstan experience, the coordinating and controlling role of the state in this area is becoming increasingly important and serves as an inherent function.

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РАЗВИТИЕ ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ ПРЕДПРИЯТИЙ МАЛОГО И СРЕДНЕГО БИЗНЕСА В КАЗАХСТАНЕ

Аннотация. Формирование инновационной экономики в Казахстане осложнено экономическими, социальными и политическими вопросами. Эффективное использование результатов научных исследований и разработок в реальном секторе экономики является наиболее важным с точки зрения успешной конкурентоспособности Казахстана, обеспечение высоких темпов экономического роста, улучшение качества жизни, а также помощь в реализации других инновационных направлений. В этих условиях управление и развитие инноваций становится все более актуальной проблемой в качестве основы для разработки казахстанских компаний, путем определенного набора соответствующих технических, эксплуатационных, организационных, маркетинговых и финансовых операций. Целью данного исследования является выявление особенностей и практических рекомендаций по развитию и дальнейшему совершенствованию механизмов управления, связанных с инновационной деятельностью предприятий в Казахстане.

Ключевые слова: инновации, инновационный процесс, инновационная деятельность, малые и средние предприятия, Республика Казахстан.

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ҚАЗАҚСТАН РЕСПУБЛИКАСЫНДАҒЫ КІШІ ЖӘНЕ ОРТА БИЗНЕСТІҢ ИННОВАЦИЯЛЫҚ ҚЫЗМЕТІНІҢ ДАМУЫ

Аннотация. Қазақстандағы инновациялық экономиканы құру экономикалық, әлеуметтік және саясаттық мәселелермен шиеленісіп тұр. Экономиканың нақты секторында ғылыми зерттеулердің нәтижелерін тиімділігін қолдану Қазақстанның бәсекеге қабілеттілігінің маңыздылығы болып табылады, экономикалық өсудің жоғарғы қарқының қамтамасыз етуге, сонымен қатар басқа да инновациялық бағыттарды жетілдіруге қажет. Осы шарттарды ескере отырып, инновацияларды дамыту және басқару қазіргі уақытта қазақстандық компаниялардың өзекті мәселелері болып тұр, сонымен қатар нақты техникалық, эксплуатациялық, ұйымдастырушылық, маркетингтік және қаржылық операциялардың жиынтығы болып табылады. Зерттеу жұмысының мақсаты Қазақстан кәсіпорындарының инновациялық қызметтерімен байланысты басқару механизмдерін одан әрі жетілдіруге тәжірибелік ұсыныстарды анықтау болып табылады.

Түйін сөздер: инновациялар, инновациялық процесс, инновациялық қызмет, кіші және орта кәсіпорындар, Қазақстан Республикасы.

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