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#### Zh.B. Khamidullina, A.K. Ermekbaeva, S.B. Zhubanova

Atyrau State University named H. Dosmukhamedov hamidzh@mail.ru, yer.ai79@mail.ru, s.zhubanova@asu.kz

# INNOVATIVE APPROACH IN THE DEVELOPMENT OF THE KAZAKHSTAN ECONOMY

Abstract. According to the research, an innovative approach to the development of the Kazakhstan economy has very significant differences in the activity of economic entities, and this primarily depends not only on regional affiliation due to the heterogeneity of the innovation infrastructure of the regions, but also on the differences in the availability of scientific and technical, financial, labor and other resources. At the same time, the state of innovation activity is the most important indicator of the development of society and the economy in any state. However, in developed countries, innovation is an integral part of the state socio-economic policy, which is indicative of Kazakhstan, given the relevance and importance of innovation for socio-economic development, the issues of enhancing innovation are identified, according to the authors, as the most important priorities of the country's economic development.

**Keywords:** innovative activity, approach, share, development, products, business.

#### INTRODUCTION

"Innovations" can be described as "Innovations" is a kind of implemented innovation, which provides a qualitative increase in the efficiency of processes or any product that is demanded by the market. It is the result of human intellectual activity, his imagination, the creative process, discoveries and inventions. An example of innovation is the introduction to the market of products (goods and services) with new consumer properties or a qualitative increase in the efficiency of production systems.

Effective innovation activity is an indicator of the movement of the enterprise to the formation of competitive advantages, since it is the implementation of innovations in a rapidly changing external world and limited resources that determines the company's further development. Innovative activity is an important characteristic of management in the analysis of enterprise activity. The state of innovation is the most important indicator of the development of society and the economy in any state.

Innovative approaches to planning are now complementing traditional forms of national planning with strategic foresight. Strategic foresight builds the capacity to envisage various alternative futures; to consider them in planning and adopt early-warning mechanisms; and not to lose sight of opportunities and risks along the way. The Governments of Rwanda and Tonga have been working with UNDP's Global Policy Centre on Public Service Excellence in Singapore to make national strategies, policies and plans more sensitive to complexity and emergent risks by using foresight methodology.

#### **MAIN PART**

In developed countries, innovation policy is an integral part of the state socio-economic policy. Given the relevance and importance of innovation for socio-economic development, the issues of enhancing innovation and investment activity are identified as the most important priorities of the economic development of the Republic of Kazakhstan [1].

World experience shows that in developed countries, spending on research and development is constantly growing, reaching in many of them 2.5 -3.7% of GDP, while the share of the state in these expenditures is on average 25-34%. These countries primarily include Israel (4.86% of GDP), Finland (4.01%), Sweden (3.75%), Japan (3.42%) and Korea (3.37%).

World crises make humanity think about the paramount importance of nature: the exhaustibility of its resources and the huge "credit" that humanity has yet to pay.

Taking into account the current state of the economy, the innovation policy at the present stage of market reforms should contribute to the development of scientific and technical potential, the formation of modern technological structures in sectors of the economy, crowding out obsolete ways and improving the competitiveness of products. The defining feature of the transfer of research results for their development in production is the creation and development of a system of commercial forms of interaction between science and production.

Australia uses a collective innovation process involving several stages:

- 1. Technological challenge. A government agency declares a specific need that links the technological task and the provision of public services (the main function of the institution). These needs are formulated as a request for proposals and representatives of the business environment are invited to offer new solutions to the problems declared.
- 2. "Feasibility study" (feasibility study). The task is to justify the viability and economic feasibility of ideas. Selected representatives of small and medium businesses receive a grant for a feasibility study.
- 3. "Proof of concept" (proof of concept). The task is to develop a sample confirming the concept as the main method of the phase, which includes evaluating the feasibility study reports. At this stage, funding is being provided for research and development aimed at confirming the concept (developing a test sample), while the ultimate goal is to demonstrate the performance of the test sample in the environment (sphere) of government (in real terms).
- 4. "Market ready" (the task is to bring the solution to the market, mass production). At this stage, the company may receive further funding to bring the developed solution to the market [6].

Thus, on the basis of studying foreign experience in stimulating innovation through the use of public procurement tools, the following main conclusions can be made about the organization of activities to promote innovative solutions in the countries discussed above:

- the presence of a building designed to house dozens of small firms (this contributes to the formation of a large number of new small and medium-sized innovative enterprises that take full advantage of the system of collective services);
- a service system consisting of a complex and simple service recruited from firms that form the service sector necessary for the established composition of innovative enterprises.
  - Achieving this goal is expected through the solution of such tasks as:
  - to promote the generation of innovations in Kazakhstan;
  - further development of leading innovation clusters;
  - definition of the scenario for the development of promising technology areas;
  - ensuring the strengthening of regional innovation systems;
- use the country's raw material potential to attract the latest technology and create high-tech industries.

The crucial importance of improving energy efficiency in enhancing energy security and addressing environmental and economic issues is emphasized everywhere. Global trends require more effective measures to curb growing dependence on energy imports.

Thus, in the development of a green economy, a clear combination and effective coordination of the following policies is needed: industrial policy, environmental policy, science and innovation policy.

In electric power industry, the innovation policy will focus on the creation and use of combined-cycle plants or gas turbine superstructures of steam power units for gaseous fuel power plants and highly efficient steam power units using the latest fuel combustion technologies (circulating boiling junction, circulating boiling layer under pressure) for solid fuel power plants, development cost-effective small and non-conventional energy, as well as solving the problem of the disposal of radioactive nuclear waste, obtaining environmentally friendly, high-quality energy from low-grade fuels, developing cost-effective power plants using renewable energy sources, and improving the efficiency of long-distance power transmission systems.

In the transport complex, the innovation policy will be focused on the renewal of the vehicle fleet, the modernization of the infrastructure, the use of advanced technologies, the improvement of the technical level of all types of transport. This applies to the renewal of railway rolling stock, sea, river and aircraft, vehicles, transshipment complexes, road machines and equipment, navigation systems.

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In the metallurgical complex, the guideline is the creation of end-to-end technological production cycles that ensure maximum resource and energy saving at all stages, expansion of the range and improvement of the quality of metal products.

To eliminate the reasons that restrain innovation development, it is necessary to develop a policy of state intervention, taking into account the experience of foreign countries. At the same time, it is necessary to use the principles of coordination, coordination and motivation, allowing to coordinate the activities of all participants. The main instrument of innovation development should be state programs as complexes interrelated in terms of resources, timeframes, and implementers of activities that provide effective solutions to the most important scientific and technical problems in priority areas of economic development.

In order to support the development of innovation, the most optimal is the effective use of economic methods of stimulating R & D, a comprehensive study of which should be in the nature of public policy. Such a government policy implies the use of special tax incentives that encourage risky medium-term and long-term investments.

To make sure local production is competitive on price and quality against foreign-made rivals, we need to increasingly take measures to boost the competitiveness of production and to make it meet international standards of quality.

In order to define possible scenarios of Kazakhstan's economic development in the medium- and long-term perspective, a detailed analysis of Kazakhstan's membership of the WTO is considered. The attention of regions and companies themselves is focused on purposeful work to prepare the economy of each region WTO membership and to adapt the business structures to tough competition, introduce new technology and innovations for production of cutting edge, high tech goods.

The Strategy's effectiveness requires the existence of a potent mechanism of interaction with local executive authorities, business and research institutions. To achieve this, heads of regions and the mayors of Almaty and Astana should approve the regional Plans for Implementing the First Stage of the Strategy. Field seminars, conferences, presentations and meetings will play a critical role in keeping the public aware of the goals and objectives of the Strategy.

These measures will allow joint discussions of the course of implementing the Strategy, to make effective moves to improve the investment appeal of processing enterprises and to develop technology transfer. These topics will be covered by the mass media in the appropriate form.

Small and medium-sized businesses will be stimulated to start up-to-date production facilities and develop promising investment projects, while research institutions will receive a new impetus for invention and developments.

Therefore the first results of the first stage of applying the Strategy to real life are expected to be these: the deeper use of scientific achievements in boosting industry's competitiveness, establishing methodology bases to monitor the measures for industrial and innovation development, and lowering the risks for foreign investors in the processing sector.

Local executive authorities must play the key role in implementing the Strategy's tasks. In turn, the government will create the necessary legal framework. Every real manufacturer and potential investor will be aware of the policy we conduct.

This is the working pattern the government sticks to when implementing the Strategy's preparation stage:

- 1. Study of the situation in sectors and marketing research to evaluate sectors' competitiveness.
- 2. Training and retraining of staff; nurturing managers of a new generation.
- 3. Ensuring sound operation of the established development institutions.
- 4. Creating an effective innovation infrastructure and developing a research and production system for the basic sectors of the economy.

We believe that institutional backing is a priority if you want to conduct any reforms.

A 400-employee Canadian division of a large American engineering company has developed and implemented project management processes for their small-scale and medium-scale projects. The company was already using a robust project management process for their large-scale projects. The objectives of this project were to reduce cost overruns and project delays, standardize practices to facilitate the integration of new managers, increase the level of customer satisfaction and to reduce risk-related

planning deviations. For this project, the engineering organization used the ISO/IEC 29110 standards developed specifically for very small entities, i.e. organizations, having up to 25 people. An analysis of the cost and the benefits of the implementation of small and medium scale project management processes was performed using the ISO economic benefits of standard methodology. The engineering enterprise estimated that, over a three-year timeframe, savings of about 780,000\$ would be realized due to the implementation of project management processes using the ISO/IEC 29110 standard. Standards are sources of codified knowledge and studies have demonstrated the benefits of standards, such as product interoperability, increased productivity, market share gains, and improved interaction with stakeholders such as enterprises, government organizations and the public. Standards and associated technical documents could be considered as a form of technology transfer and, if the right standards are selected and used correctly they should have an economical impact in an organization.

Many advantages or benefits as well as disadvantages or costs have been reported regarding the use of voluntary standards. Table 1 lists a few of the advantages and disadvantages reported.

Table 1- Advantages and disadvantages of voluntary standards reported (adapted from Miotti, 2009; Land, 1997)

Advantages or Benefits	Disadvantages or Costs
Promote innovation	Difficult to understand
Improve efficiency of an organization	Cost of acquire standards
Increase competitiveness	Cost of standard implementation
Facilitate the access to a wider market	Cost of certification
Clarify the rules of a market	Require outside expertise to implement them
Improve quality of products and services	Conflicting standards
Promote improvement of Processes	High number of standards available
Facilitate partnerships	• Describe only 'what to be done' not 'how to do it'
• Improve the image, credibility of organizations	Insufficient guidance to select and apply them
Promote a uniform terminology	Slow evolution of standard may impede innovation
Regularly updated	Difficult and costly to apply in small organizations
• Facilitate the selection of suppliers and partners	Difficult to demonstrate 'savings'
<ul> <li>Facilitate access to recognize knowledge</li> </ul>	Many producers of standards
Facilitate access to investments and financing	Perception that standards add unnecessary bureaucracy to an organization

The most recent study on the economic benefits of standardization (Miotti, 2009), performed by the French standardization organization AFNOR, showed that standardization made a significant contribution to growth of the French economy during the 1950-2007 period, i.e. 0.81% per year or almost 25% of GDP growth. The study was based on a survey of 1,790 French companies or organizations of all sizes and from all sectors of activity where 30% of respondents were from enterprises of less tan 20 employees, 47% from small and medium enterprises (i.e. 250 employees or less) and 23% from large companies (i.e. more than 250 employees). The contribution of standards to the French economy is in line with data illustrated in Table 2 for other countries, such as Germany and Australia.

# **CONCLUSION**

New partnerships must be built. We must continually improve our processes to become more agile. We must be calculated risk-takers. We should openly share what works and what doesn't.

Thus, world experience shows that the main tool is the reduction of corporate income tax, depending on the level of innovation receptivity that an enterprise has achieved. The higher the level of innovation susceptibility, the more tax breaks can be obtained. At the same time, the condition for obtaining benefits is mandatory successful commercialization of R & D results. A noticeable impact on the inflow of private investment in the sphere under consideration is also played by more universal macroeconomic regulation measures: bank interest rate, level of taxation of profits of industrial companies and citizens' incomes, the value of tax rate on securities transactions, etc.

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#### Ж.Б. Хамидуллина, А.К. Ермекбаева, С.Б. Жубанова

Х. Досмұхамедов атындағы Атырау мемлекеттік университеті

# ҚАЗАҚСТАННЫҢ ЭКОНОМИКАНЫҢ ДАМУЫНДАҒЫ ИННОВАЦИЯЛЫҚ БАҒАЛАУ

Аннотация. Зерттеулерге сәйкес, Қазақстан экономикасының дамуына инновациялық көзқарас шаруашылық субъектілерінің қызметінде айтарлықтай айырмашылықтар бар және бұл, ең алдымен, өңірлердің инновациялық инфракұрылымының біркелкілігіне байланысты емес, сондай-ақ ғылыми-техникалық, қаржылық, және басқа ресурстар. Сонымен қатар инновациялық қызметтің жағдайы қоғамның және экономиканың дамуының маңызды көрсеткіші болып табылады. Дегенмен, дамыған елдерде инновация мемлекеттік элеуметтік-экономикалық саясаттың ажырамас бөлігі болып табылады, ол Қазақстанның әлеуметтік-экономикалық дамуының инновацияның маңыздылығы мен маңыздылы-ғын ескере отырып, инновацияларды жетілдіру мәселелерін анықтайды, авторлардың пікірінше, елдің экономикалық дамуының маңызды басымдықтары.

Түйін сөздер: инновациялық қызмет, тәсіл, үлес, даму, өнімдер, бизнес.

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## Ж.Б. Хамидуллина, А.К. Ермекбаева, С.Б. Жубанова

Атырауского государственного университета имени Х.Досмухамедова

## ИННОВАЦИОННЫЙ ПОДХОД В РАЗВИТИИ КАЗАХСТАНСКОЙ ЭКОНОМИКИ

Аннотация. Инновационный подход в развитии Казахстанской экономике согласно исследованию имеет весьма существенные различия в активности хозяйствующих субъектов и это прежде всего, зависит не только от региональной принадлежности из за неоднородности инновационной инфраструктуры регионов, а также с имеющимися различиями в обеспеченности последних научно-техническим и, финансовыми, трудовыми и иными ресурсами. При этом, состояние инновационной деятельности является важнейшим индикатором развития общества и экономики в любом государстве. Однако, в развитых странах инновации являются составной частью государственной социально-экономической политики, что является показательным для Казахстана, учитывая актуальность и важность инноваций для социально-экономического развития, вопросы активизации инновационной деятельности определены, по мнению авторов, как важнейшие приоритеты экономического развития страны.

Ключевые слова: инновационная активность, подход, доля, развитие, продукция, бизнес.

#### Сведения об авторах:

Хамидуллина Жанат Баймуратовна - Ст.преподаватель, Атырауский государственный университет имени X.Досмухамедова, <a href="https://orcid.org/0000-0002-4928-1224">https://orcid.org/0000-0002-4928-1224</a>;

Ермекбаева Айнур Конилкошевна - Магистр экономики, Атырауский государственный университет имени Х.Досмухамедова, <a href="https://orcid.org/0000-0001-9643-5292">https://orcid.org/0000-0001-9643-5292</a>;

Жубанова Сауле Бауржановна - Ст.преподаватель, Атырауского государственного университета имени X.Досмухамедова, <a href="https://orcid.org/0000-0002-7286-8904">https://orcid.org/0000-0002-7286-8904</a>

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